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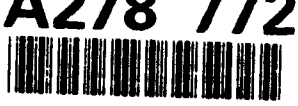

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Tripler Army Medical Center (TAMC) is in an early stage of its TQM implementation process. No coherent, unified scheme to foster the most appropriate TQM training of assigned personnel has been determined. The purpose of this project was to develop indicators of an efficacious TQM training program for Tripler Army Medical Center. This will aid and complement the implementation plan and will result in effective training of personnel. In determining which type of TQM training program to use, a qualitative approach was employed. The research design was the multiple case study method and the primary assessment tool was individual, personal interviews of other hospital organizations. The study identifies the principles of the successful training programs and those strategies which should be avoided. Recommendations for a quality structure and traiing program are made in the concluding section of the study. By utilizing this research, TAMC can formulate a TQM training program which will avoid the pitfalls and mistakes of other hospitals, while capitalizing on those training approaches which were successful. Once the training plan has been outlined and ratified, the TQM Quality Council will integrate it with the global implementation of the TQM plan.

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Determining Successful Approaches for a Total Quality Management Training Program for Tripler Army Medical Center Hawaii

A Graduate Management Project (GMP)

Submitted to the Faculty of

Baylor University

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Healthcare Administration

by

Major John C. Shero, MS

June 30, 1993

RUNNING HEAD: TQM Training

ABSTRACT

In 1988 President Reagan mandated that the Department of Defense (DOD) would implement Total Quality Management (TQM) principles in all areas of its operations. More recently, Army Regulation 5-1 adopted the tenets of TQM as the official Army management policy. TQM is viewed as the best management method to improve quality and productivity in the health care industry while reducing costs.

Tripler Army Medical Center (TAMC) is in an early stage of its TQM implementation process. No coherent, unified scheme to foster the most appropriate TQM training of assigned personnel has been determined. The purpose of this project was to develop indicators of an efficacious TQM training program for Tripler Army Medical Center. This will aid and complement the implementation plan and will result in effective training of personnel.

In determining which type of TQM training program to use, a qualitative approach was employed. The research design was the multiple case study method and the primary assessment tool was individual, personal interviews of other hospital organizations. The study identifies the principles of the successful training

programs and those strategies which should be avoided. Recommendations for a quality structure and training program are made in the concluding section of the study. By utilizing this research, Tripler Army Medical Center can formulate a TQM training program which will avoid the pitfalls and mistakes of other hospitals, while capitalizing on those training approaches which were successful. Once the training plan has been outlined and ratified, the TQM Quality Council will integrate it with the global implementation of the TQM plan.

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INTRODUCTION

The Federal Government and the U.S. Army require all organizations to implement a Total Quality Management (TQM) plan by 1995. Tripler Army Medical Center does not have a training plan to assist in the adoption and utilization of TQM. This study has evaluated the TQM training programs at several large teaching hospitals. Using a qualitative analysis approach, the study identifies the principles of the successful training programs and those strategies which should be avoided.

The leaders of healthcare organizations across the country are facing significant pressures to improve the quality of their services while reducing the rate of cost increases within the industry (Sahney & Warden, 1991). A paradigm shift in the delivery of health services has been called for by consumers, as well as, business, government, and healthcare industry leaders (Zemke, 1989). TQM has been credited by many leaders in the manufacturing industry as an effective tool to manage their organizations (Walton, 1990). TQM is now regarded as the most exciting prospect for improved

management of service organizations (Labovitz, 1991).

To give further impetus to the TQM initiative in military organizations, in 1988 President Reagan mandated that the Department of Defense (DOD) would implement TQM principles in all areas of its operations (Reagan, 1988). More recently, Army Regulation 5-1 (1992) adopted the tenets of TQM as the official Army management philosophy. This has led the U.S. Army Health Services Command (HSC) to stimulate all medical activities (MEDDACs) and medical centers (MEDCENs) and encourage them to rapidly employ TQM in their operations and procedures (H. Shepeard, personal communication, November 17, 1992). This is a significant challenge for military healthcare executives. TQM is a long-term investment, practiced by everyone in the organization, and results in radical cultural change. To achieve success, managers must realize that results may not come quickly and that total implementation of TQM may take five years (Berry, 1990).

The philosophy behind TQM is the belief that the customer comes first. It also focuses on continuous

quality improvement in all processes (Crosby, 1984). This philosophy embraces the following principles: top leadership and support, focus on the customer, training, employee involvement, recognition and reward, empowerment and teamwork, long-term commitment, continuous process improvement, communication, reliance on standards, and measurement and analysis (Army Regulation 5-1, 1992; Deming, 1982). An effective quality management program is one in which all members of an organization view quality and productivity to be of the greatest importance.

One of the leaders in TQM, W. Edwards Deming, describes TQM as a philosophy which is predicated on the basic principle that organizations must constantly improve the quality of their systems and processes to better serve their customers (Walton, 1986). Defining opportunities for improvement, identifying the potential causes of problems, and then, taking action to eliminate the causes is the central theme of this concept. In the end, implementation of TQM results in less rework, fewer mistakes, fewer delays, fewer bottlenecks in the process, and increased efficiency in

the use of time and materials.

Funding for Army medical treatment facilities (MTFs) is shrinking. Coupled with this, personnel resources are being reduced, requirements for new and expensive services are increasing, and the cost of poor quality (COPQ) is rising. Because of these critical factors, it is apparent that improvements in productivity and efficiency afforded by TQM will be crucial to military healthcare leaders (Cunningham, 1992).

To succeed, this paradigm shift in organizational culture and operations must be planned in a detailed and comprehensive manner. The proper training of personnel is an integral part of this planning. Many different TQM philosophies agree that effective training of employees is critical to the process of continuous improvement (Lowe & Mazzeo, 1986). Employee education and training is a central feature of achieving the behavioral and cultural changes associated with adopting TQM. Effective training will also bolster and motivate the workforce, both during the TQM implementation process and after implementation

is complete (Sahney & Warden, 1991).

Currently, there is no consensus among the experts on what method to use in executing a TQM training program. There are a wide variety of viewpoints and opinions on what should be taught to employees, and even how the training should be administered. The great danger of this is that the training program will not meet the needs of the organization and the TQM program will be hampered, or even fail because of this deficiency.

This study is intended to evaluate the TQM training programs at several large teaching hospitals. The results of this qualitative analysis will identify what approaches have been successful in other similar facilities and which approaches have failed.

Problem Statement

The Federal Government and the U.S. Army require that a TQM plan be implemented by 1995. The TQM plan at Tripler Army Medical Center (TAMC) is in its earliest stages and does not contain a training plan to assist in the adoption and utilization of TQM. The goal of this project is to use the multiple case study approach to identify what training strategies have resulted in successful training programs in other, similar facilities. The project will also identify those strategies which have not been successful and should be avoided. From these, the project will recommend which training modality and process to utilize at TAMC. These recommendations will be presented to the TAMC Quality Improvement Council for their consideration and possible use in the overall implementation plan.

LITERATURE REVIEW

The purpose of this review was to compile information on various TQM philosophies and how they relate to TAMC. In researching TQM training for this project an extensive review of current literature on the field of TQM was conducted. This is presented to establish a foundation for the discussion of TQM.

The recent focus on TQM as a solution to the management and performance problems in today's business environment has given rise to a plethora of books, articles, and seminars. However, the roots of TQM are neither new or revolutionary (Walton, 1986). W. Edwards Deming is recognized by many authorities as the father of the total quality management method. Deming, along with Philip B. Crosby and Joseph M. Juran, are generally thought to be the leaders of the industrial quality movement (Sahney & Warden, 1991). The philosophy of each of these gurus will be discussed in this section.

Quality Philosophy of W. Edwards Deming

Dr. Deming first became famous for his total

quality philosophy in post-World War II Japan. He was recruited by the Supreme Command for the Allied Powers to help prepare for the 1951 Japanese Census. Following this, he was asked by the Japanese manufacturing community to lecture on quality and process control and is credited with the major turnaround of the post-war Japanese economy (Walton, 1986).

Deming advocates a strong commitment on the part of management toward a long-term perspective, including clearly defined mission and vision statements. These statements should provide all employees with guidance in their day-to-day actions. Quality must become a central focus within the organization. The emphasis must shift from inspection of results to prevention of the causes of variation in the process. Preventing defects before they occur and improving the process so that the defects do not occur, are the goals for which all employees in the organization must strive. (Walton, 1986; Deming, 1982)

Deming believes that an organization will be served more effectively by developing a long-term

relationship with a few suppliers, rather than switching from one supplier to another simply because of price. A long-term relationship allows suppliers to "buy in" to the organization and become partners. It should reduce costs and put resources into improving facilities and technology.

Training and retraining of employees is viewed as critical to the success of the organization. Deming believes that it is management's job to coach and motivate employees. Education and training are seen as investments in people resources which will reap long-term dividends. They help to avoid employee burnout, reenergize employees, and send a clear message to employees that management considers employees to be a valuable resource (Walton, 1986; Deming, 1982).

Deming also believes that management must concentrate on variability within processes. He advocates systemic understanding of variation and reduction of controllable variation as a strategy to improve processes within the organization. Deming believes that enhanced productivity is best achieved by continuous quality improvement, called the Deming Chain

Reaction (Walton, 1986). Improving quality through improving processes will ultimately reduce waste, rework, delays and bottlenecks, and scrap. The net effect is to simultaneously improve productivity and quality (Walton, 1986; Deming, 1982).

As an adjunct to his management philosophy Deming developed his "14 obligations of top management" and the "seven deadly diseases" of management that should be avoided (Deming, 1982). These will be discussed in a later section, along with Crosby's "14 steps of quality improvement".

There is ample evidence in the literature that Deming's principles are applicable to health services delivery systems as well as manufacturing processes. His philosophy is credited with providing an excellent framework for resolving chronic problems facing health care institutions, such as excessive waiting time during admission of patients (Sahney & Warden, 1991).

Quality philosophy of Philip B. Crosby

Crosby is another of the preeminent figures in total quality management. His definition of quality as

"conformance to requirements" has given impetus to proper design of products and ensuring that products conform to the design requirements (Crosby, 1984).

Crosby strongly advocates the ultimate goal of quality as "zero defects" and that the organization should always be striving for this goal. He believes that the best measurement of quality is the "cost of quality" and that this consists of the price of nonconformance, as well as, the price of conformance.

The price of nonconformance includes the cost of internal failures, such as reinspection, retesting, rework, scrap, repairs, and lost production. The price of nonconformance also includes the cost of external failures, such as replacement, damage claims, liability, legal services, and lost customers. Crosby estimates that the cost of nonconformance to an organization may be as much as 25 to 30 percent of operating costs. On the other hand, the price of conformance includes the cost of education, training, and prevention, as well as the cost of inspection and testing. The goal of an organization should be to minimize the sum of both costs (Crosby, 1984).

Crosby's systematic 14 step process is designed to provide quality within an organization, while minimizing the cost of nonconformance and cost of conformance. The cornerstone of this process is commitment of top management. It is regarded as a top-down program. The focus on process improvement, management leadership, error-cause removal, employee training, and worker awareness of quality are the key tenets of this process.

Quality philosophy of Joseph M. Juran

Dr. Juran has become a leading proponent of TQM in America and is best known for his "Quality Trilogy". This concept is Juran's universal method of thinking about quality that fits all functions, levels, and product lines. According to Juran, managing for quality consists of quality planning, quality control, and quality improvement (Juran, 1988).

Quality planning is the start-point, and is when an organization focuses on the process of planning for quality. This is the point where the needs of the internal and external customers are captured. These

needs are then converted to the necessary product specifications. Quality planning then calls for the design of a process which meets these goals and specifications (Sahney & Warden, 1991). The end result is a process which is capable of meeting the quality goals under operating conditions (Juran, 1988).

The next step in Juran's Quality Trilogy is quality control. This step begins with the definition of the quality characteristics that need to be measured. These are aspects of the process which are critical to overall product quality. For each item that is to be monitored, the units of measure and the frequency of monitoring are defined and control limits, based on the process capabilities, are established. The job of quality control is to then monitor the process and take corrective action to keep the process under control and performing adequately. This step in the trilogy also calls for employee training to ensure the success of the process.

The final step of the Quality Trilogy is quality improvement. Quality improvement should be performed by teams which are knowledgeable in the process and who

are working on well-defined, systematically selected projects. The teams must be properly trained to be effective in these tasks and responsibilities. Juran (1988) has stated that frequently, organizations will stop after completing the first two steps in the process and will not follow the plan to fruition. He believes that quality improvement is the key step in reaching new quality heights and cannot be neglected.

Although the similarities of the management philosophies of Deming, Crosby, and Juran are not as readily apparent as their differences, they do share some common threads. The next section further compares their philosophies and discusses Deming's 14 obligations and Crosby's 14 points.

Comparison of the philosophies

There are several similarities between the management philosophies of Deming, Crosby, and Juran which were noted by Success and Mazzeo (1986). All three philosophies agree that a cornerstone of any quality improvement program must be employee training. They view management commitment as a key component of a

successful quality improvement program and believe continuous quality improvement must be a component of the organizational climate. They also agree that it is management's job to interact with the employees to improve the system. There also exists a similarity in their emphasis on maintaining a customer orientation or customer focus in conducting business. However, a number of differences were also noted.

Crosby defines quality as "conformance to requirements" while Juran defines it as "fitness for use". At one point, Deming simply defines quality as "whatever the customer wants and needs". However, in the introduction to Out of the crisis, (1982) he states that quality is "a predictable degree of uniformity and dependability, at low cost, and suited to the market" (p. 2).

Other differences focus on training and quality measurement recommendations where Deming is noted for his emphasis on statistical techniques and almost rabid opposition to using the cost of quality as a measurement tool. He believes that the cost of quality cannot be accurately measured because too many costs,

such as the loss of customers, are immeasurable and unknown (Sahney & Warden, 1991).

Deming's approach is considered to be a bottom-up process because of his focus on statistical tools, while Crosby's approach is top-down because of his emphasis on first changing the management culture. Juran's approach is considered to be most involved in middle management because of his project-by-project approach in quality improvement (Witt, 1991).

There is also abundant evidence in the literature which suggests that these three philosophies are not independent, but rather interdependent (Lowe & Mazzeo, 1986). They suggest that one philosophy taken alone may not be nearly as effective as tailoring a TQM program which takes something from each approach. In this way, an organization exploits its strengths and concentrates on those areas which may be weak. The only caveat to this approach is that the program must maintain a clear-cut methodology, be systemic in its attack of problem areas, and utilize quantitative techniques to statistically measure its progress (Witt, 1991).

It is of particular interest that Deming and Crosby both have 14 points in their respective implementation plans. Deming's 14 Obligations of Top Management or 14 Points are listed by Walton (1986) as:

1. Create constancy of purpose for improvement of product and service.
2. Adopt the new philosophy.
3. Cease dependence on mass inspection.
4. End the practice of awarding business on price tag alone.
5. Improve constantly and forever the system of production and service.
6. Institute training.
7. Institute leadership.
8. Drive out fear.
9. Break down barriers between staff areas.
10. Eliminate slogans, exhortations, and targets for the workforce.
11. Eliminate numerical quotas.
12. Remove barriers to pride of workmanship.
13. Institute a vigorous program of education and retraining.

14. Take action to accomplish the transformation.

As an adjunct to these points, Deming also espouses the Seven Deadly Diseases which management should avoid.

1. Lack of constancy of purpose.
2. Emphasis on short-term profits.
3. Evaluation by performance, merit rating, or annual review of performance.
4. Mobility of management.
5. Running a company on visible figures alone.
6. Excessive medical costs.
7. Excessive costs of warranty, fueled by lawyers that work on contingency fee.

(p. 34-36)

Crosby (1984) lists his 14 Steps of Quality Improvement as:

1. Management commitment.
2. Quality improvement team.
3. Measurement.
4. Cost of quality.
5. Quality awareness.
6. Corrective action.
7. ZD (zero defects) planning.

8. Employee education.
9. ZD (zero defects) Day.
10. Goal setting.
11. Error-cause removal.
12. Recognition.
13. Quality councils.
14. Do it over again.

(p. 99)

Each of these philosophies emphasizes the commitment of management, education of employees, and training followed by retraining. However, Deming's 14 points are clearly more of an instructional "what to do" list for management, while Crosby's steps are a "how to do it" list for managers. The concepts of both individuals have merit and an effective TQM plan should borrow the best from each of them. By incorporating the ideologies of more than one of these quality experts the TQM plan may be tailored to fit the needs, culture, and philosophy of an organization.

Total Quality Management Training

The Deming concept of training and retraining

employees as an investment in human capital is of particular note at this juncture. His message is that training should help avoid employee burnout, reenergize employees, and present a clear signal that managers are concerned with employee welfare and view employees as a valuable asset (Walton, 1986). This clearly shows the importance that Deming ascribes to effective employee training.

Much of the literature indicates that TQM training must start at the top and then "cascade" down through the organization (Walton, 1986). A corollary to this view is that employee education and training at all levels of the organization are central to a motivated workforce (Sahney & Warden, 1991). However, these opinions are not universally shared by all TQM authorities or consultants.

Some experts believe that organizations should conduct "blanket training" where every employee receives indoctrination training within a relatively short time (Anbari & Roberts, 1992). Others temper this belief by advocating "just in time" training for Process Action Teams (PATs) and others requiring more

than an overview of TQM (Cunningham, 1992). Since a large part of this TQM training is to assist in changing behavior, it must be designed to meet the needs of all personnel (Anbari & Roberts, 1992). This is obviously a delicate and complex set of needs and goals and calls for a comprehensive, in-depth training program.

Sage Analytics International (1990), a well-known TQM consulting group, only slightly differs from this in promoting an expanded view of TQM training. They state that:

> A successful training program requires executive leadership to be trained in change strategy, statistics, problem solving and innovation management, communication management, and human resource management. Middle managers must acquire skills in quality awareness, empowering employees, problem identification and evaluation, statistical process control, delegation and follow through, communication management, and human resource management. The on-line work force needs training in quality awareness, problem identification,

development and implementation of improvement actions, monitoring processes, teamwork, and communication skills. (Sage Analytics International, 1990)

Many experts believe that all employees must be trained not only in their job, but in the quality improvement process as well. Because of this broad application, the standardization and adoption of a common methodology and language in statistical process control (SPC) and process analysis becomes a necessity. Sahney and Warden (1992) state that quality education should include instructions for utilizing simple SPC tools, problem solving, process improvement, and group/team techniques.

There is an obvious lack of consensus on what TQM training should be comprised of and how it should be administered. A dangerous pitfall in the TQM training process is that the training could fail to meet individual and organizational needs. This failure would have a grave effect on the overall program and might result in its downfall.

One method to avoid the failure of the TQM

training program is to standardize training in the organization. By adopting an archetype for TQM training, an organization can foster communication across its functional areas and departments, thereby reducing friction and misunderstandings. An added value is that members from different segments of the organization will share a common terminology and philosophy and can serve on a number of process action teams (PATs) without additional training or retraining.

Because there is no comprehensive, unified TQM training plan at Tripler Army Medical Center, the training approach has been disjointed and without a coherent focus. Quite a number of outside consultants have conducted training, but there is little similarity between the different training sessions. The consultants even have different terminology and definitions for describing quality and the quality improvement process. By evaluating similar facilities and their TQM training programs, this study will make recommendations on how to effectively implement a unified training program at Tripler.

PURPOSE OF THE STUDY

Tripler Setting

Tripler Army Medical Center (TAMC) is a 536-bed acute and tertiary care hospital and teaching institution. As the only military hospital in Hawaii, TAMC provides health services to not only the Army, but the Navy, Air Force, Marines, Coast Guard, and Department of Veterans Affairs beneficiaries as well. Additionally, TAMC is the only comprehensive federal referral center in the Pacific and receives referrals from military hospitals throughout the Pacific Basin and the Independent Pacific Island Nations. Because of this unique aspect of its mission, TAMC provides health care for a total population of over 570,000 customers. Because of this large population base, TAMC supports over 3,000 outpatient clinic visits per day and discharges almost 2,000 inpatients per month. As a major teaching hospital, TAMC also maintains an active clinical research mission which supports its medical education programs and enhances its patient care mission (Brennand, 1992).

TQM Background at TAMC

TAMC formally adopted TQM as its management philosophy in 1991. However, it was not incorporated into a plan until the TAMC Strategic Planning Conference in May, 1992. The stated TQM vision of TAMC is:

> We are a federal healthcare facility. Our vision is to be the premier healthcare system in the Pacific Basin. Working together we will integrate modern technology and provide responsive, caring health services to enhance the lives of our beneficiaries in peace and war.

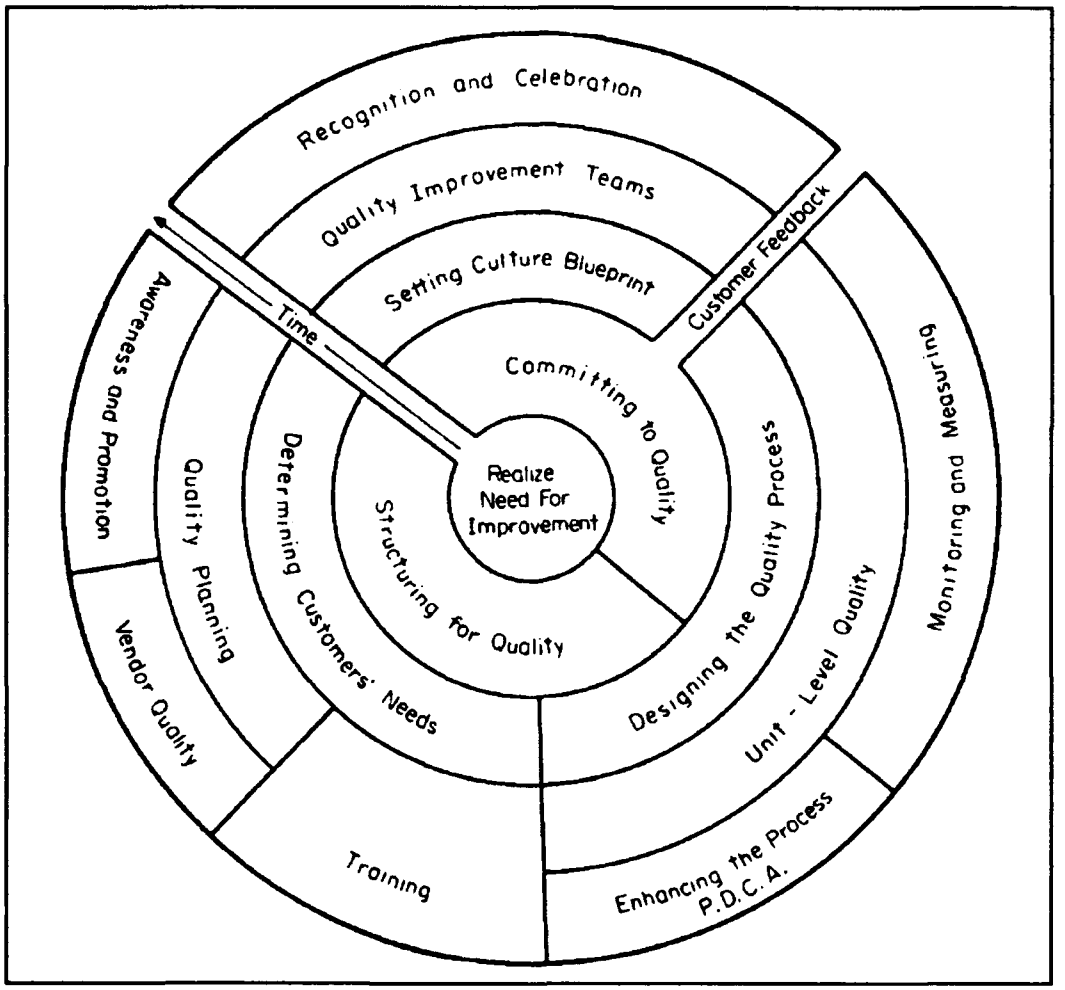
TAMC's Quality Policy is:

> At Tripler Army Medical Center, quality is our first priority. It is everything that matters to our patients and staff. We pride ourselves on providing the finest health care possible in an environment of excellence. We are committed to the concept of continuous, process oriented improvement.

Since 1991, TAMC has been pursuing its approach to quality improvement and management based on the Total

Quality Process Model (Figure 1) developed by Berry (1990). However, at the current time this approach is under review and may be modified or deleted in the future.

Figure 1. The Total Quality Process Model.



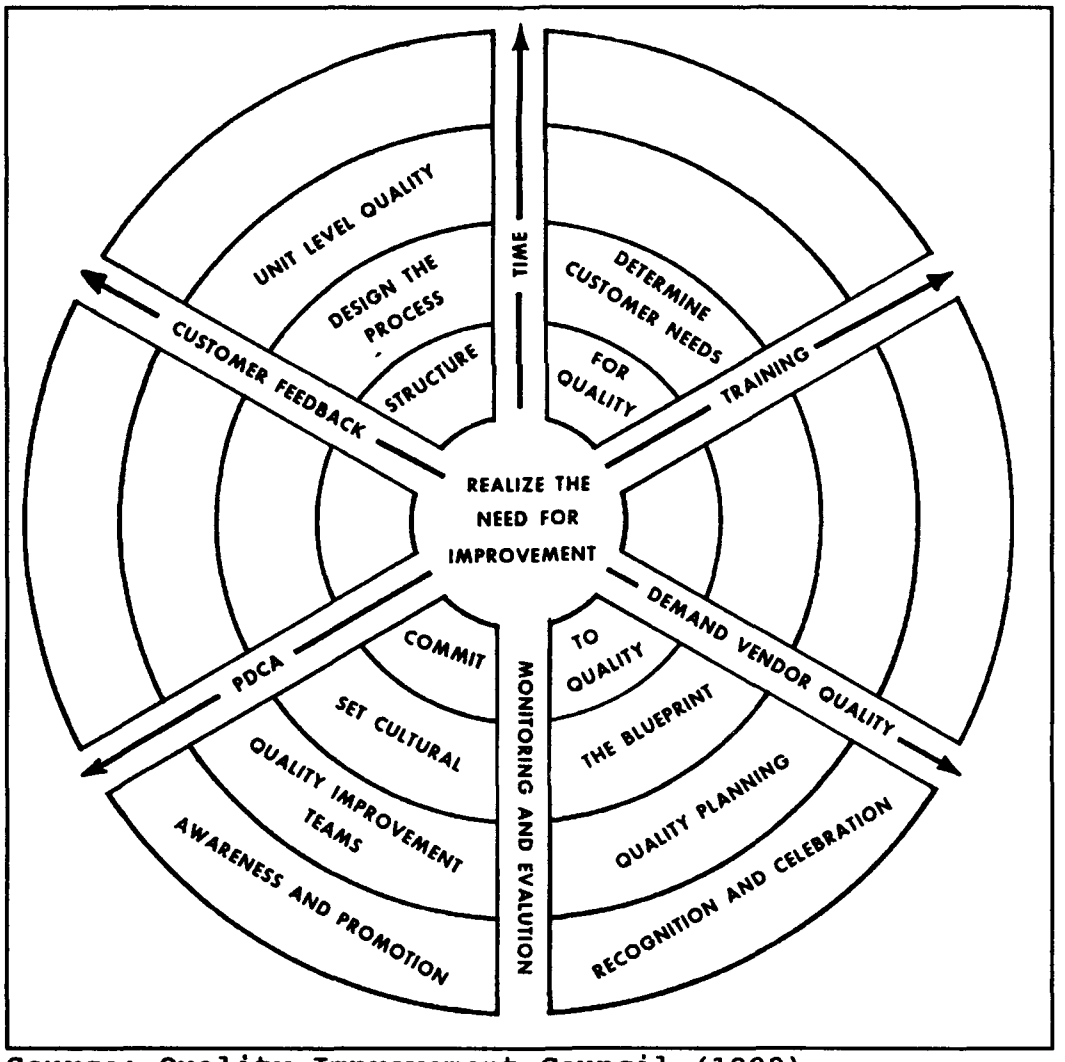
Source: Berry (1990)

As shown in Berry's Total Quality Model, the TQM process begins with management's acknowledgement of the need for quality improvement (Berry, 1990). Next in the process is the structuring for quality which consists of forming the quality council and making the commitment to quality. The customer feedback channel is initiated at this point in the model. As this conceptual model depicts, customer feedback is an ongoing process and must be continuous throughout the program. The next major steps in the process are designing the quality process, establishing the cultural blueprint, planning for quality, training for quality, enhancing the process, monitoring and measuring, and recognizing and celebrating the successes.

While this conceptual model is an excellent starting point for a TQM program, the TAMC Quality Improvement Council has shown its commitment to quality and has further developed this model to better match the organizational climate and needs. In supplementing the original model, the TAMC Quality Improvement Council has sought a conceptual model which more

closely fits the philosophy of the organization and demonstrates a greater commitment to training.

Figure 2. The TAMC Total Quality Model



Source: Quality Improvement Council (1992)

The new model bears a striking resemblance to a wagon wheel and uses the spokes of the wheel to depict the ongoing processes in the implementation plan. In this more sophisticated model the need to implement employee training, demand vendor quality, monitor and evaluate processes, establish customer feedback, and initiate the plan-do-check-act (PDCA) cycle is recognized from the beginning of the process.

Berry (1990) has also outlined a TQM implementation process which borrows from both Deming and Crosby. This blending of the respective philosophies has resulted in a program which more closely fits the organizational culture and needs. The TAMC-specific plan is currently being reviewed, further developed, and refined and will be published at a later date. The Quality Improvement Council is currently seeking a "TQM coach" from outside the facility who will act as a consultant and assist in the development of this plan.

Because of its dedication to quality improvement, TAMC has been able to implement the initial phases of the TQM model and implementation process. A Quality

Improvement (QI) Council which directs, supports, and participates in the development and administration of the TQM process has been formally instituted. The council is chaired by the Commanding General and is primarily composed of the Executive Committee of the hospital. Because of this composition, it has representation from the highest levels of the organization, but it has also been supplemented by other personnel from throughout the hospital. This was done to capitalize on the human resources within the institution and broaden the scope and representation on the council. The QI Council is comprised of the personnel described in Table 1 and listed by position title, rank, and corps.

Table 1

Quality Council Membership

Title	Rank	Corps
Medical Center Commander	Brig Gen	MC
Deputy Commander for Clinical Svcs	Colonel	MC
Chief of Staff	Colonel	MS
Director, Clinical Military Ops	Colonel	MC
Director, Quality Improvement	Colonel	MC

Chief, Department of Nursing	Colonel	AN
Chief, Ministry and Pastoral Care	Colonel	CH
Chief, Department of Psychiatry	Colonel	MC
Chief, Clinical Nursing Service	Colonel	AN
Pharmacy Service	Captain	MS
Liaison, Civilian Personnel Office	-	CIV
MEDCEN Command Sergeant Major	CSM	NCO

Note. Corps are abbreviated as follows: MC- Medical Corps, MSC- Medical Service Corps, AN- Army Nurse Corps, CH- Chaplain Corps, CIV- Department of the Army Civilian, NCO- Non Commissioned Officer Corps.

Another initiative has involved the formation of Process Action Teams (PATs). Approximately 15 PATs have been activated and used in solving quality problems and for special projects. Five of the PATs have been completed and have made recommendations, or have implemented changes to the process. The remainder of the PATs are at various stages in studying their processes and making recommendations.

TAMC's most recent TQM initiative is its customer assessment program. This program was developed to

identify quality issues for improvement through customer feedback. This has served as the springboard for further research into the assessment of customer satisfaction and its implications for the organization (Smith, 1992).

Approximately 280 TAMC personnel, or 10% of the employees, have received training on quality improvement philosophies and the TQM process. The training sessions were, for the most part, organized by different departments in the hospital and were presented by outside consultants. The training sessions have varied in length from 4 to 40 hours and covered a diverse collection of materials. One recognized flaw of these presentations is that they greatly differed in their approach to TQM and its execution.

METHODS AND PROCEDURES

Study Design and Methodological Approach

Methodological approaches in the assessment of quality and the effectiveness of TQM programs, to include training, are not yet standardized and the literature in the field is voluminous and diffuse. However, research in this area can be divided into two general categories: quantitative and qualitative (Steiber & Krowinski, 1990). Each approach has its particular advantages and disadvantages, depending on the type of research question or problem which is being evaluated.

Quantitative research uses an inductive approach to exploring and understanding the research question. Quantitative research is usually most appropriate when the research question involves "how many" or "how much". Conversely, qualitative research uses collected data to determine the degree to which one factor influences another and to assess the change as factors are modified. It is usually most appropriate when the research question involves a study of "what, how, or

why" (Yin, 1988).

Because the problem addressed in this study relates to "what, how, or why" a TQM training program is successful, the statistical tools called for by the quantitative approach are not as appropriate as a qualitative study of the problem. Therefore, the study used a qualitative approach to answer the research problem.

Yin (1988) states that if you need to know "how" or "why" a program has (or has not) worked, a study should employ either a case study or a field experiment approach. In this particular study there was no researcher control over behavioral events associated with the subjects being examined and the events being studied are of a contemporary nature. Because the study fit these criteria, the case study approach was the most appropriate.

A multiple-case design was selected because the evidence from multiple-case studies is often considered more compelling and the overall study is then regarded as more robust (Yin, 1988). The major drawback of this design is that it requires far more extensive time and

resources than a single-case design.

The number of cases to be studied was determined by the replication logic of the study. This examines the cases to be studied with the object of either predicting similar results (literal replication), or producing contrary results for predictable reasons (theoretical replication). Yin (1988) finds this method analogous to conducting experiments on related topics and recommends six to ten cases for adequately determining both a favorable outcome (TQM training success in this study) and a negative result. Therefore, this study examined ten cases and used an individual interview technique to collect the data.

Validity

This study addresses validity in a number of different ways. To begin addressing construct validity the study needed to develop an appropriate interview instrument. The literature is replete with issues which must be considered in designing a TQM training program. However, there was no standard method to determine or measure which were the most critical

considerations. The instrument for this study was developed from questions and concerns about TQM training and implementation which were found in several journal articles, books, and other sources (Berger & Sudman, 1991; Berry, 1990; Labovitz, 1991; McLaughlin & Kaluzny, 1990; Melum, 1990; Sahney & Warden, 1991; Stiffer, 1992; and Witt, 1991). Along with this base of questions, a number of questions which had been asked by the Tripler Army Medical Center QI Council were also added. Finally, construct validity for the instrument was ensured by having a TQM consultant and an instructor in the U.S. Army-Baylor Program review the proposed interview instrument and make recommendations for changes. These minor changes were then incorporated into the final interview instrument (see Appendix A).

External validity was addressed by setting criteria for selecting the facilities to interview and study. These criteria guaranteed that the hospitals which were selected had begun their TQM implementation and training process, had graduate medical education (GME) teaching programs, and were greater than 300 beds

in size. These criteria were also designed to ensure that the findings could be generalized to other medical center hospitals. Since TAMC is a Department of Defense (DOD) facility, the majority of the cases selected were DOD hospitals.

Reliability

Reliability of the study was satisfied by only using one interview instrument (see Appendix A) and by meticulously documenting the study procedures. This documentation included tape recording the interviews, whenever possible. Tape recording the interviews also ensured that the data collected was detailed and robust. Ethical considerations and anonymity for the interview participants was protected by not divulging names of the facilities studied and not disclosing the names of interviewees.

Interview Procedures

There were a total of ten hospitals selected for this study using the screening criteria noted earlier. These criteria ensured that the hospitals which were

selected had begun their TQM implementation and training process, had graduate medical education (GME) teaching programs, and were greater than 300 beds in size. Of the hospitals selected, three were Army medical centers, two were Navy medical centers, two were Air Force medical centers, one was a Veterans Affairs (VA) medical center, and two were civilian hospitals. One of the civilian hospitals was a large, county-run medical center and the other was a medium-size, for-profit health maintenance organization (HMO) facility.

The preferred interview technique was a personal, face-to-face interview between the researcher and a representative of each facility. This would have allowed the interview to be tape recorded and would have been a standard approach to the interview. Unfortunately, of the ten hospitals which were interviewed only four were personal interviews and could be tape recorded. This was due to resource constraints in money and time which did not allow for travel to all of the interview sites. The other six hospitals were interviewed by telephone. In each

interview there were detailed, meticulous notes taken by the interviewer. This was to ensure that the information captured would be accurate, detailed, and robust.

The personnel interviewed at the hospitals were primarily assigned as Director of Quality, Director of Quality Improvement, or a similar position. Three facilities had assigned the duty of managing TQM to their Director of Quality Assurance. One interview included the Deputy Commander for Administration of the hospital, as well as the Director of Quality Improvement. Appendices B through K represent the results of these interviews and give additional demographic data. They are not literal transcriptions of the interview, but they contain the essence of the interviews and a number of direct quotations from each interview.

After the study is completed and approved, proposals for TQM training will be submitted to the Command Group and the QI Council for their review and approval. The QI Council is responsible for supervising the global implementation of the TQM plan.

FINDINGS AND CROSS-CASE ANALYSIS

The analysis and comparison of the ten cases will be divided into two main categories. The first category will compare the three cases where TQM has not been successfully implemented, or has been stalled in its implementation (see Appendices B, C, and D); the second will examine and compare the remaining seven cases where TQM has been more effectively implemented (see Appendices E through K).

Unsuccessful TQM Implementation

There are two distinguishing features of the cases where TQM has not been successfully implemented. The first feature is that the organizations have recognized that they are not progressing in their TQM implementation process. This is found in their responses to Question 2. In Case 1 (Appendix B) and Case 2 (Appendix C) the TQM program is described as "basically stalled" and "stalled," respectively. Further, in Case 3 (Appendix D) the TQM program is described as "stopped... until a budget is developed and approved" by the Chief Executive Officer (CEO).

The similarity in these descriptions is striking and is the primary reason the cases were categorized as not successfully implementing TQM in their facilities.

The next revealing characteristic is that responsibility for TQM was assigned as an additional duty in these three facilities. In each of these hospitals the Quality Assurance (QA) office was given the responsibility for TQM as an additional duty, without supplementary personnel resources to help in managing the program (see Question 4). None of the other seven cases, where TQM has been more successful, used this particular technique to assign responsibility or resource the TQM program. This approach is found only in the institutions where TQM was not successful.

The lack of additional personnel resources to assist in managing the TQM programs could indicate several different attitudes on the part of the CEOs. It could indicate that the CEO has confidence in the QA manager's ability to administer TQM without augmentation; however, there was no evidence in the interviews to support this supposition. It could also indicate the CEO does not believe that TQM is important

enough to warrant the additional resource expenditure and that the CEO lacks commitment to the program. There was a significant amount of evidence in the interviews to support this view. Another explanation could be the CEO was not given training in TQM which would stress its importance to the institution, the need for TQM programs to have executive commitment, and the need for proper resourcing. Answers to some of the questions posed to the former QA supervisors give insight and support in this area.

The answer given in Case 1, Question 9 is very enlightening. It states that "TQM is just an additional duty and it really needs to be a dedicated duty position." In Case 2, Question 25 they state that managing the TQM effort "can't be a part-time effort or you're doomed." This clearly shows the concern of the TQM managers for adequate resources and staffing.

Another facet of this problem is the perceived lack of commitment on the part of the executive leaders and particularly of the CEO. In Case 1 and 2 the responses to Question 12 were quite comparable. Case 1 states "top leaders weren't really interested in TQM

training." Case 2 states that "executives didn't want to devote the time to attend the top-down training." The answer to Question 13 in Case 3 also points out a TQM problem. It states that the CEO "only went to four hours of training because he isn't a believer in TQM." Proper training of the CEOs and senior leaders is obviously lacking in these cases, but the root problem is a lack of commitment and involvement on their part.

In each of the three cases where TQM was not successfully implemented the CEO was not involved with the TQM effort. The respective answers to Question 14 clearly demonstrate this lack of involvement. In Case 3, Question 14 it states that the CEO "isn't a player" and has had a poor attitude toward TQM. Likewise, in Case 1, Question 14 it states that the CEO "is not actively involved" in the TQM program. Case 2, Question 14 states that the CEO is Chairman of the Quality Leadership Team, but that "Unfortunately, this group doesn't meet on a regular basis."

These responses outline a serious lack of commitment by senior executives and an unwillingness to further their TQM education or get involved in the TQM

program. Without effective training of the senior executives the implementation of TQM was severely hampered and the organization lacked leader commitment. The end result was that adequate resources were not devoted to the TQM effort and the organization's TQM programs were thwarted. This, coupled with the lack of strong leadership from the executives, further eroded the effectiveness of the TQM attempt.

One aspect of the cases which was very disparate related to how the TQM plans were developed. Questions 7 and 8 revealed the three facilities had produced their TQM plans in a dissimilar manner. Case 1 primarily used an unpaid, external consultant and developed their unique plan as a testbed for their corporate (military) headquarters. Case 2 had a contract consultant who gave them a standard package which was not specifically tailored for the organization. Case 3 used internal assets in the form of a focus group to develop a tailored TQM plan, without any outside help. Even though the plans were developed differently and had contrasting views on the focus of their plans, they shared a common bond; none

of the plans were successful. However, this was probably not related to how the plan was developed as much as it was contingent upon how TQM had been implemented.

Another area in which the cases are dissimilar is their approach to TQM training. Case 1, Question 9 revealed that this organization had a discrete approach to their training modality and "did initial training and not much else." They had conducted overview training for about one-third of their employees during these initial sessions, but "we really need just-in-time (JIT) training for PATs." Case 3, Question 9 related that only 10% of their employees had received TQM training, although it was being conducted in a continuous manner.

This was greatly different from Case 2 where two-thirds of the employees had attended "Awareness Training" for TQM. However, an enlightened comment made in Case 2, Question 9 was that although a significant portion of the organization had received awareness training, "we really need to re-look how we trained the executive management." The admitted

weaknesses in training executives and PATs underscores the fact that TQM training must be comprehensive in its scope and not concentrate their focus on a few areas or groups. If areas are neglected, pockets of resistance can form and cripple the TQM effort. This was pointed out in the answers to Question 16.

A shared weakness between these cases is found in their answers to Question 16. None of these organizations had implemented specialized training programs for a number of the groups which are crucial to the successful implementation of TQM. The failure to implement "target group training" for these selected areas is a critical shortfall. Even more seriously, the failure to have trained facilitators and PATs almost certainly doomed their efforts at process analysis.

Also of note in this area is the answer to Case 3, Question 25 (2). It states that physicians should be involved in the early stages of TQM and that "They should be at the front of the train." However, this organization had not developed any training programs which would foster the awareness and involvement of

physicians. The organization is aware that physicians need to be involved, but they are hampering this end result by not formulating specialized training to achieve this goal.

Some of the confusion caused by the attempt to implement TQM is evident in the answers to Question 19. In Case 2, when asked how to get all the staff involved, the response was "I don't really know." This was mirrored by the response in Case 1 which was, "This is very problematic. You can't really get all the staff involved." These answers point out that even those individuals in charge of TQM implementation may periodically need training, guidance, and help in overcoming obstacles to its implementation.

Questions 20 and 21 also connote that occasionally the TQM coordinator may need outside help and guidance. When asked how their organizations measure TQM success and TQM training success the answers were somewhat vague and unfocused. Case 1 and Case 2 did not really have a formal method to measure either of these areas. Case 3 responded that there were standards set for PAT outcomes and the TQM program was evaluated by examining

the results of the PATs, but they did not measure training success. It is myopic to evaluate the success of an entire plan by looking at a very narrow segment of that program. These organizations need to get help in designing adequate measures of success.

Question 23 gives an excellent comparison of the different "lessons learned" by these three organizations. Case 1 states "Do it [TQM] because it's of benefit, but its got to happen at the lower levels." Case 3 states "It's very frustrating to start in the middle. You really need the executive leadership to break down barriers." Case 2 states "You don't want to do it [TQM] unless you mean it. If you're satisfied with the status quo, don't attempt a TQM conversion."

These very different perceptions of their respective lessons learned provide implied, as well as overt, information. In Case 1, the program is being focused on a "grass roots" TQM movement because of apathy and obstruction by the senior executives. This approach is usually not successful because the resistance of the executives will eventually kill the TQM movement. In Case 3, the message is that they want

the support and involvement of the executives, but that middle management is going forward with or without them. This could result in goal bifurcation between the two groups and a serious organizational conflict. Case 2 connotes that without the CEO and executives serving as the impetus for the radical cultural change effected by TQM, you should stay in your "comfort zone" and not attempt a TQM transformation. For career bureaucrats in a highly formalized, rigid autocracy this may be sound advice.

Question 24 asked the organizations to describe the three best things about each of their TQM programs. All three of the cases cited increasing the employee awareness of TQM as a strong point. This would correspond with the concept of a grass roots TQM movement where an organization was trying to reach a "critical mass" of knowledge and enthusiasm for the program. Unfortunately, this approach has found little success in organizations which lacked senior executive support and leadership. Case 3 also cited empowerment as a key strength by stating "We eliminated the fear of making changes and then getting fired for it." This

basic tenet of TQM is also difficult to nurture without executive support, although middle managers can make a difference in this area.

Question 25 asked the organizations to describe three mistakes which they had made in implementing TQM. Case 1 emphasized the need to "get top-down support" and approach both executive training and PAT training in a completely different manner. In hindsight, they recognized the critical need for effective training of executives, coupled with just-in-time training for employees. Had they followed this course initially, they would not have had the same problems with negative executives and the work force would not have seen TQM as "just another management philosophy."

In responding to Question 25, both Case 1 and Case 3 accented the need for proper resourcing and support of the program. Case 2 cited fear of change and negative fantasies among employees as a problem. However, this was because they had "sent the wrong message to the work force." Case 2 also related that frequent changes to the composition of the Quality Leadership Team gave the employees a perception of

chaos, indecision, and confusion on the part of the senior executives. This message could have very serious consequences for the organization and could even cause a "crisis of confidence" in the organizational leaders.

Successful TQM Implementation

Some differences in the remaining seven cases were apparent from the outset of the analysis. In Question 1, Case 4 (Appendix E) they state that the TQM program began in 1988, whereas Case 6 (Appendix G) states that their TQM program was not formalized until August, 1992. Because of this time variation, the cases are at different points in their TQM training milestones and implementation timeline.

There were also a number of similarities between these cases. As seen in Questions 3 and 4, six of the seven cases had created a new position for the TQM director. This was a completely different approach than that taken by the three facilities where TQM was not successful. While Case 10 (Appendix K) did not create a new position, the section was augmented with

four additional personnel. Also, many of the functions of TQM complemented responsibilities which already existed in the current structure. Question 4 states "We already had responsibility for industrial engineering and information technology, so this optimized our systems."

Another similarity between the cases was their response to Question 5. Six of the seven cases cited at least one part of the "cost-quality-access triad" as the focus of their TQM program. Case 4 stated that "Continuous Quality Improvement is the focus, with the outcome of improving quality." Case 6 wanted to have a customer focus, maintain quality, and use fixed resources more efficiently. Case 5 (Appendix F) also focuses on improving quality and reducing waste, inefficiency, duplication and complexity. The answer to Question 5 in Case 9 (Appendix J) does a good job of tying these different concepts together. It makes the following statement:

> We are committed to improving the processes within our facility. In this way we will meet three goals: (1) improve quality, (2) improve

accessibility, and (3) cost containment. The three cornerstones of this are: (1) process improvement, (2) using facts and simple statistical tools to make decisions, and (3) continuous improvement in all areas.

One particularly fascinating answer to Question 5 was given in Case 10 by a civilian hospital. It stated that "Increasing customer satisfaction and retaining all members and employees is our 'big picture' goal. We've asked the staff to cut things that weren't valuable... especially in improving access to routine care." I found this to be conceptually similar to the answers given by a number of the military hospitals. The close resemblance to answers given by military hospitals would support the premise that TQM implementation lessons can cross cultural boundaries.

Questions 6, 7, and 8 asked how the organization's TQM plan had been developed. With the exception of Case 7 (Appendix H), who said "We don't have a formal plan.", all the TQM programs had developed a "tailored plan" which was modified to fit their facility.

Four of the six cases with formal programs had

used outside consultants to help develop their TQM plans. Case 8 (Appendix I) used Quorum Healthcare as a consultant because "Quorum is one of the few consultation groups that are healthcare-based." As seen in Case 6, there was also very high enthusiasm and acceptance when the plan was primarily developed by internal assets and had been tailored to fit the institution. Case 6, Question 8 states that, "We selected an 'eclectic program' design so that our process is a hybrid developed to fit this hospital. No one single program could work."

The remaining two cases used external packages and programs as archetypes and then adapted the plan to fit their particular facility. Case 9, Question 8 states, "We took the Hospital Corporation of America package and then modeled it and adapted it to fit the facility."

Whether the organizations used an internal asset or outside consultant to develop their TQM plans, they shared a philosophy of tailoring the plan to the individual facility. This is a key facet in ensuring that the plan is effective and that it will be accepted

by the organization. The development of "eclectic programs" to meet the specific needs of the facility guarantees that the plan fits the corporate culture and complements the organizational goals and mission. In this way, TQM endeavors are focused in the right direction and economy of effort is achieved.

Questions 9 and 10 provide insight into the organization's training process and how it was formulated. The training process was described as continuous in all seven cases. The most frequently cited reason for this was because of personnel turmoil, gains, and losses. The need for shift worker training was also noted as a problem and was referred to in Case 10 as a reason for continuous training. Case 6 also cited the need for refresher training in its continuous training plan. Refresher training would sharpen those TQM skills which had deteriorated over time and would also serve as an opportunity to re-energize the personnel attending training.

While Cases 4 and 9 were too new in their TQM process to have a formalized training plan, Cases 5, 7, and 10 had used an internal assessment to assist in

devising their TQM training plans. Reinforcing the importance of this assessment, Case 8 stated that although their plan was working well, its formulation "was a fluke" and no internal assessment had been done.

Assessing the internal climate and culture, coupled with establishing baseline evaluations of TQM training, should not be neglected. This modality of formulating the TQM training program will pay many long-term dividends and will allow the organization to benchmark its training, as seen in Case 5, Question 10. Yet another benefit is the ability to evaluate training progress against the baseline evaluation, however, Case 10 was the only organization using this specific tool.

Question 11 asks for more detailed information about the training programs. In Cases 5, 6, 7, 8, and 9 the training objective contained elements of the just-in-time (JIT) philosophy. Only Case 4 was trying to achieve a "critical mass" in its TQM training. As noted earlier in the study, the critical mass method is seldom successful in achieving TQM success. Case 8 described their program as starting with a "shotgun blast" approach, but now they are moving to embrace JIT

training because it is more effective. This supports the concept that JIT is the more efficacious training approach.

There was some variation in the number of different types of training which the facilities offered. Revealed in their answers to Question 11, Cases 5, 6, and 8 offered five types or levels of training that generally corresponded with each other. Cases 9 and 10 both offered six levels of training, but the courses did not correspond as closely.

Case 7 had the most stratified training program and offered nine formal types of training and two informal types. While this approach would achieve a "targeted training" goal for the work force, its complexity and the associated difficulty with managing this many training programs could be prohibitive.

Another interesting aspect of the different training plans was the great variation in the amount of time trained. For example, Cases 8 and 9 only provide one hour of overview or awareness training, while Case 5 provides six to ten hours in its awareness training course.

It is evident from these findings that there is a wide variation in both the type of training offered and its relative duration. This clearly shows that tailoring the training program to your facility may result in a training plan which is very dissimilar to that found in a comparable sized organization. The overarching goal should be to have the training meet the needs of the organization and the TQM program. The bottom-line is that there is no "one-best-way" to orchestrate TQM training and the organization should develop its own tailored or eclectic plan. If a facility does not have the necessary expertise to internally develop this tailored plan, it may require the assistance of an outside consultant.

In answering Question 12, all seven cases subscribed to the "top-down" approach to training, but for a variety of different reasons. Case 5 cited the consultant's recommendation as the primary reason for using the top-down approach. Case 4 stated that "You MUST get senior leader commitment to TQM and training is the most effective way to achieve this."

Case 10 said that "Behaviors which you want to

encourage in lower-level personnel will get 'knocked down' if upper-level management doesn't understand TQM and how it works." In Case 9 they saw another facility "where an Airman usurped the 'referent knowledge' and position of the middle managers." Since TQM principles could be seen as a threat to the "referent power" and knowledge of managers, it is better to have managers already trained and comfortable with TQM before their subordinates get trained. This will assist in avoiding conflicts like those cited in Case 9.

In Question 13 the facilities were asked what TQM training their CEOs had been exposed to and what was the focus of that training. In six of the seven cases there was a unifying theme; the CEO was sent to several short-duration courses and the training process was seen as continuous, rather than a discrete event. This was in sharp contrast to the cases where TQM was not successful. In those three cases the CEOs had received little training, usually involving only one training course, and their training was characterized as finished. The failure to properly train these CEOs may be directly related to their lack of commitment to TQM.

One of the most glaring differences between the cases there TQM was not successful and those cases where it was successful is found in the answers to Question 14. In the unsuccessful cases, the CEO had very little involvement with the TQM program and senior leader commitment appeared to be very low. In the successful cases, the CEO generally serves as a role model for TQM and is very actively involved with the program.

In Case 10 it states that "The CEOs [two] keep the program going, remain steadfast, and always encourage people toward TQM. They do lots of ceremonies, thread TQM into all their activities, and 'walk the talk' for the institution." This is closely paralleled by the response found in Case 4. Case 4 states that the CEO "comes to all courses and gives a pep talk and most importantly, he incorporates TQM in all speeches, commander's calls, etc.." Case 9 makes the following statement:

> There is an obvious commitment of his [the CEO's] time and effort. The Commander [CEO] is fond of saying that when it comes to TQM 'you can buy-in,

or die-in' and also, 'you can get on the bus, or get under it.'

These vivid descriptions of the commitment to TQM made by the CEOs illustrate why the programs in these cases have not lacked executive support. This is in sharp contrast to Cases 1, 2, and 3, where the CEOs were characterized as not believing in TQM and TQM was not successful.

Another key difference between the unsuccessful cases and those which were successful was illustrated by their answers to Question 16. Cases 1, 2, and 3 had no specialized TQM training programs. Conversely, all of the cases with successful TQM programs had at least two special training programs for selected groups. Of the successful programs, the only facility which had not developed specialized training for PATs and facilitators was Case 4. This was because their training program was still being created and had not been finalized. Aiming the "target group training" at PATs and facilitators demonstrates that these facilities understand how vital it is to have accurate, reliable process analysis and effective utilization of

statistical process control tools.

Cases 5, 6, 7, 8, and 10 had developed specialized training courses for their middle managers. Since middle managers are often cited as obstructions to TQM implementation, these special training programs probably paid huge dividends in overcoming resistance to change and ensuring TQM success.

Questions 17 and 18 tried to determine who manages TQM training and how training and PATs are tracked. In all seven cases, these actions were administered from the same office. However, there was a great degree of variation in what information was tracked and how it was recorded. Some cases only had "stubby pencil" lists to track personnel training, while others used commercial software applications for their personal computers, or mainframe computers with special software.

To track PAT information, Cases 4 and 5 had the PATs forward copies of their minutes, but the teams often failed to provide the minutes. This seems to fall short of providing the necessary information. At the opposite end of the spectrum, Case 10 used a

commercial software application package which captured a large amount of very detailed information. Case 10 also used representatives from their "Quality Council" to periodically visit PAT meetings and serve as a sponsor for the PAT. It is necessary to follow the progress of PATs to ensure they are progressing and have not hit a "roadblock" in their study of a project. The use of sponsors from the executive leadership assists in both monitoring the team's progress and in giving positive reinforcement to the team.

When the facilities were asked how to involve all the staff members in TQM there were two basic responses. Case 7 gave its reply in one word: "training." Training was referred to in some form by six of the seven cases. The other prominent response was senior leader or CEO involvement which, once again, emphasized this critical element in TQM success. Case 9 made the following statement:

> The Commander's [CEOs] words speak loudest. His involvement with teaching, visiting the staff at work, going to the midnight staff meetings... does more than any formal training course to get people

involved and committed. From his actions, we see people lobbying to be on PATs because they want to be "team players" and get the Commander's rewards.

The responses to Question 20 were interesting, in that they pointed out an area which may need more emphasis in TQM implementation. Only two of the cases had any formal method of measuring TQM success. The hospital in Case 10 uses Baldridge Award criteria to evaluate their organizational success. Case 6 is using internal benchmarking and will soon begin periodic re-assessments to evaluate their TQM success. While these methods may be good, they appear to neglect external benchmarking against competitors. This oversight could affect the competitive advantage of the organization or give it a false sense of security. Additionally, the inability of most organizations to quantify their measure of success could be construed as "smoke and mirrors" by staff members who are negative toward TQM.

Only four of the facilities had any method of measuring TQM training success and in each of these cases it was assessed by using post-course surveys. A better measure might be to use the post-course survey,

but also do a follow-on evaluation some time after the course was completed. This could give context to the course evaluation and would allow students to see if the course material was truly useful.

When asked about facilitator training in Question 22, the facilities had a number of interesting observations. Case 10 stated that "you can't really facilitate and do your job at the same time." Case 7 emphasized the proper selection of facilitators by stating they would not need to train additional facilitators if the ones they had already trained were good. Proper selection of personnel would have conserved both training resources and personnel resources.

Case 8 disclosed that 40 of 56 facilitators had to be retrained. This was because they had received their initial training early in the TQM process and then did not get to use the skills they had learned. This would indicate that training which has close temporal proximity to its use is the preferred methodology.

The answers to Question 23, which reflect the lessons learned by the facilities, were fascinating.

While there were a wide range of responses, with the exception of Case 8, there was a common theme found in each of the cases; the need for senior executive support of the program and effective, top-down training.

Case 4 stated "The ESC [Executive Steering Committee] can only push so much, but you need them pushing. The Directors [senior executives] must be the apostles for TQM." Case 9 commented that you need to start at the top because senior staff buy-in is critical. Case 10 echoed this by saying to "Continue top-down training."

Another part of this common theme was the emphasis on effective training. Case 9 recommended that facilities cascade their training, train before implementing, do statistical process control training early in the process, and use one standard approach to training. Case 4 stated "Train first, before you try to solve problems." Case 7 was an advocate of JIT training coupled with top management support. The significance ascribed to effective training in ensuring that TQM implementation is successful cannot be

overstated. It is obvious from the comments and lessons learned that these facilities have realized the value of this training.

Two facilities mentioned middle managers in their lessons learned responses. Case 4 stated that "It's critical to get buy-in from middle managers." Case 5 was also concerned with this buy-in and revealed that the facility had "Underestimated the resistance from middle management; [because] they felt very threatened." These responses add further credence to the earlier commentary about executive support and top-down training. It is clear from these comments that middle management resistance should be anticipated and countered with early, effective training.

The answers to Question 24 were extremely diverse and did not correspond between the different cases. This was probably due to the very nature of the facilities' tailored approaches to TQM implementation and differences in the individual corporate cultures. However, there were some comments which were particularly perspicacious.

Case 10 stated that "Using the eclectic approach

in designing the program and ensuring that we didn't use a 'one best way' technique" was a key strength. Also commenting on the program design, Case 7 cited their program structure and varied, tailored training programs as important, valuable attributes. The formation or synthesis of a TQM program design by melding several different approaches is clearly the preferred, most effective method.

Case 6 related that the format of their training was interactive and was a real value-added to the program. It also said that making the training a living model was a very good concept. The flexibility and feedback built into this type of training program would give it the ability to change as environmental or customer needs shifted. This could be particularly important as health care undergoes further paradigm shifts, in response to which the TQM training program would be altered.

In Question 25 the facilities described those areas which they classified as mistakes. Three of the facilities cited a failure of their initial training effort to adequately train PATs before they were given

projects. This is gravely dangerous to programs in their infancy and can have serious, long-term repercussions. When teams are chartered and given missions for which they are not adequately prepared, it sends the wrong message to the facility. If team members are not following the TQM process and using statistical analysis in their study it can invalidate their efforts. The end result of this failure would be, in effect, "poisoning the well" for future TQM endeavors.

Also of note were the two cases who cited resourcing as a major detractor to TQM. Case 7 and Case 8 both cited the lack of a dedicated TQM budget as a crucial shortcoming. Without their own budget, they had to beg for everything. Because health care reimbursements and military budgets are shrinking, this problem is unlikely to disappear. Frequently, one of the primary goals of a TQM program is to increase efficiency and generate cost savings. While this is usually the result of TQM efforts, it frequently requires the expenditure of "seed money" to achieve results. There is ample evidence in the literature

that TQM investments pay huge dividends. TQM programs should be adequately resourced and have a dedicated budget so these dividends can be realized.

One last mistake noted in Case 5 was the need for PATs to have a more focused charter. They state that if a PAT is given a project charter, such as "solve telephone access," there is little chance that they will be successful. This is especially critical for the early PATs so that their success can be publicized and build enthusiasm for the program.

The answers to Questions 23, 24, and 25 provide superb insight into both the achievements and shortcomings of these TQM programs. The observations found in these answers should foment the examination of TQM in other institutions to determine if they are duplicating the errors listed here. Likewise, this examination and analysis of the TQM program would reveal areas where success and proficiency could be copied. Executives must closely husband their time, but it is well worth the effort to read and learn from the triumphs and mistakes of these institutions.

CONCLUSIONS AND RECOMMENDATIONS

The previous section noted a number of cases where TQM had not been optimally implemented because of improper structuring for TQM and training deficiencies. This section will first address the need for effective TQM structuring at TAMC and will then make recommendations for the TQM training program.

Structuring for TQM

The structure for TQM must support the entire quality program. TQM will be impossible to implement without an effective structural component for the implementation process. One of the most important components of this structure is resourcing for the TQM program. Cases where TQM had both succeeded and failed noted the absolute need for adequate resources and a dedicated budget.

TAMC does not currently allocate a budget to TQM, but will soon hire a full-time TQM Coordinator. The Coordinator should manage an assigned budget which is allotted for the TQM section to foster quality at TAMC. This would preclude the need for each project to

undergo the intense scrutiny of a Program and Budget Advisory Committee (PBAC) review and would keep "nonbelievers" from derailing TQM projects.

Another function which the TQM Coordinator should manage is the communication plan for TQM. This would exploit TAMC's existing capabilities and also establish new channels for TQM communication. The TQM Coordinator should establish a "TQM Users Group" and a "TQM Newsletter" within the existing functions of the Composite Health Care System (CHCS) automation network. This would exploit TAMC's enviable automation position, because few facilities possess an integrated, system-wide capability like CHCS, and would publicize the TQM process. There should also be users groups for specific TQM populations. This would include a group for facilitators, PAT leaders, and a "super user" group for key personnel in the TQM effort. The users groups would not obviate the need for facilitators and PAT leaders to have periodic meetings in which they could share information and celebrate successes. Rather, they would serve as an adjunct to these meetings and would promote increased cross-functional communication.

The final link in the communication chain is between the Commander and the TQM Coordinator. The Commander must develop and promote the organizational vision, but the TQM Coordinator must be his link to the organization. If this "boundary spanning" relationship is dysfunctional, then TQM will not be properly nurtured. To cultivate this relationship I recommend that the TQM Coordinator be treated as a special staff officer and report directly to the Commander. This direct-line connection is found in the majority of the cases studied and appears to be the most effective method.

The final area of TQM structuring which must be addressed is the need to establish a standard model for TQM and quality improvement. This standard model is particularly necessary because of the various TQM methods and techniques which have been previously taught at TAMC. Because of the many philosophies and terminologies which have been presented to separate groups, various departments cannot relate their TQM experiences in the same terms. There must be a communal language to discuss TQM so confusion and

obscurity is not created, causing TQM to be viewed as disorganized and chaotic.

The need for standardization also extends to process analysis and the use of statistical process control (SPC) tools. Adopting an archetype for all PATs to use would greatly reduce confusion when PAT members serve on more than one team. Standard methodologies, such as the FOCUS-PDCA (McEachern & Neuhauser, 1989) strategy, could also aid executives in monitoring and assisting PATs. Using common SPC tools would allow greater automation support and encourage patronage by "super users" and special TQM assistants.

In the aggregate, these measures are designed to facilitate the implementation of TQM and to lay a foundation upon which TQM training may be built. Without this foundation, TQM will not be effectively activated and efficacious training will be thwarted.

Training for TQM

Once the TQM structure is in place, TQM training can begin. However, before TAMC begins to train its employees the organization must determine what its

customer needs and expectations are. This could best be accomplished by an internal assessment of the work force. The QI Council has commissioned an internal assessment, but it must include an analysis of employee attitudes and TQM needs. This study could then be incorporated into the TQM training program as a baseline measure of employee opinions. Establishing a baseline would guide the development of TQM training and would facilitate future assessments of TQM training effectiveness.

Top-down training is the principal tenet of TQM training and was prominently featured in both the literature and case reviews. This training modality is also called "cascading" training because information and training will flow down from the top through each level of the organization. Logically then, the most crucial level of training is at the very top.

To ensure TQM success, the training of the CEO (Commander) and senior executives (QI Council) must be a proactive, ongoing process. This was seen in nearly all of the cases where TQM was successfully implemented. Planning for the QI Council to receive at

least one training session each quarter should be the minimum. This could be conducted by local TQM experts, or by consultants contracted to present specialized instruction. In addition to this, the Commander should attend at least two off-site TQM seminars each year. This would give a more global perspective to the QI Council and would be a cost effective method of "cascading" the latest information to the entire organization. The commitment and involvement of the executive leadership has been shown to be absolutely critical. Nurturing and reinforcing the executive leader's TQM education is an investment in their involvement and will pay enormous dividends.

The next phase of the TQM training program calls for developing a comprehensive training plan. While this should be predicated on the results of the internal assessment, there are some principles which will nonetheless apply to the final plan. The preeminent goal is to achieve just-in-time (JIT) training for the employees and to have that JIT training focused on their needs. This will necessitate the development of several classes to achieve

efficacious training of TQM "target groups."

The successful TQM programs listed earlier had developed a number of specialized training courses to focus on their target groups. Based on these programs, TAMC should develop five or six specialized courses. At a minimum the courses should address target training for senior leaders/department chiefs, facilitators, PATs, new employees, and middle managers. Key components of the courses should be to involve physicians, involve and co-opt middle managers, and overcome the fear of change at all levels.

The course duration and content should be developed by the TAMC TQM Coordinator, with the help of outside consultants. Some facilities have contracted for specialized training courses and have seen this technique successfully implemented. TAMC should explore the available training resources and cost-benefit analysis of this approach.

An important adjunct to the training program is the analysis of the results of the training. TAMC should develop course evaluations which would evaluate and quantify the success of the training. The

evaluations should be both prospective and retrospective. The pre-course and post-course evaluations would allow trainers to determine how well the course had met the employee expectations and what could be improved. These evaluations would be supplemented by a six month, follow-up evaluation of the course. This would focus on the utility of the course in the student's daily TQM activities and how well the course had met their later needs.

These evaluations would give TAMC the ability to implement process improvement into the structure of the training. It would also be possible to benchmark TQM training against other facilities and evaluate the program's accomplishments in this way. By measuring the progress and success of the training programs, TAMC could alter the training in response to new paradigms which had modified the organizational needs.

One final component of the TQM training program should be dialoguing with other facilities and digging out lessons learned. The guidance and expertise gleaned from the cases examined in this study have proven to be invaluable. Gathering cross-cultural

information and getting fresh perspectives and solutions to problems has been an excellent approach.

With an efficacious training process which complements and promotes TQM implementation, the TQM program should become energized throughout the organization. This new impetus should carry the TQM program through its next phases and on to fruition. An effective TQM program will be instrumental as TAMC moves to face the challenges of providing the best care possible to its beneficiary population. As resources decline and requirements for services increase, the TAMC program for TQM training will foster the necessary paradigm shift to continuous improvement. This component of the TQM program will be critical to the implementation of quality improvement and the provision of health services.

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APPENDIX A

TQM TRAINING QUESTIONS

INTERVIEWEE: **POSITION:** **HOW LONG:**

FACILITY: **DATE:**

NUMBER OF BEDS: **NUMBER OF PERSONNEL:**

NOTE: DEFINE THE APPLICABLE TERMINOLOGY BEFORE THE INTERVIEW.

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?

3) HOW IS YOUR TQM PROGRAM ORGANIZED?

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?

HOW WERE THEY SELECTED?

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?

6) HOW WAS YOUR TQM PLAN DEVELOPED?

7) WHO HELPED DEVELOP YOUR TQM PLAN?

WERE OUTSIDE CONSULTANTS USED?

IF SO, HOW WERE THEY SELECTED?

DID YOU USE MORE THAN ONE?

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?

WHO HELPED IN THIS PROCESS?

HOW WAS IT APPROVED OR ADOPTED?

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?

WHO ASSISTED IN THIS PROCESS?

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?

HOW WAS THAT DETERMINED?

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?

WHO DEVELOPED THE TRAINING OBJECTIVE?

12) WHAT TRAINING MODALITY (ie TOP-DOWN) IS USED IN YOUR PROCESS?

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?

INTERNAL OR EXTERNAL?

WAS THERE MORE THAN ONE TRAINING SESSION?

WHAT WAS THE FOCUS OF THIS TRAINING?

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?

INTERNAL OR EXTERNAL?

WHAT WAS THE FOCUS OF THEIR TRAINING?

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?

PATs?

FACILITATORS?

PHYSICIANS/CLINICIANS?

MIDDLE MANAGERS?

NURSING STAFF?

CUSTOMER RELATIONS?

17) WHO IS IN CHARGE OF TQM TRAINING?

HOW WAS THAT DECISION MADE?

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?

18) DOES ANYONE TRACK PATs? WHO?

IF SO, HOW, AND WHAT INFO IS TRACKED?

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?

WHO MEASURES IT & HOW IS IT **QUANTIFIED**?

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS?

(LESSONS LEARNED?)

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1)

(2)

(3)

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1)

(2)

(3)

APPENDIX B

CASE NUMBER 1: TQM TRAINING QUESTIONS

FACILITY: A large Army Medical Center in the Southwest.

POSITION: Chief, Quality Improvement.

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
February 1992.

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
"Not far. We are basically stalled." Have done overview training for about one-third of the staff. Did train-the-trainer on TQM Methods and Tools for about 100 people. "We don't have a vision statement or quality mission. Implementation has been difficult because of 'non-believers' throughout the facility." There have been some hospital-wide teams (PATs) and some "renegade" teams in departments.

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
"It's not as structurally formalized as it should be." A TQM implementation plan has been approved by the Executive Committee (Board of Directors). Teams report to the Board of Directors. "There is no special quality council and no real quality structure." Has been an additional duty for the Quality Assurance staff.

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
Quality Improvement. "The Quality Assurance (QA) Office was given TQM as an additional duty and is now called Quality Improvement."

HOW WERE THEY SELECTED?
Recommendation by Health Services Command (HSC) Chief of Quality Improvement. Adopted at the Strategic Management Conference, which we did not attend (were not invited).

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
None known, other than HSC recommendation.

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?

Most classes were given by HSC with the focus on health care. Also took a Methods and Tools Course- Institute for Healthcare Improvement (a very expensive course).

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?

No specific focus, but cost containment, process improvement etc. are focused on improving efficiency.

6) HOW WAS YOUR TQM PLAN DEVELOPED?

Developed by the QI office based on literature reviews and HSC guidance. Closely tied to the QA/QI plan.

7) WHO HELPED DEVELOP YOUR TQM PLAN?

HSC consultant (Army officer), HSC guidance, Utilization Management (UM) Committee, and the Board of Directors.

WERE OUTSIDE CONSULTANTS USED?

HSC consultant.

IF SO, HOW WERE THEY SELECTED?

The consultant was free and there was no money budgeted for consultation fees. "The price was right (free), given our lack of a budget."

DID YOU USE MORE THAN ONE?

"No. Again, this was a function of money."

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?

Developed our own.

WHO HELPED IN THIS PROCESS?

The same as above.

HOW WAS IT APPROVED OR ADOPTED?

Staffed through the UM Committee and then approved by the Board of Directors.

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?

"We did initial training and not much else." 'Live' training was done in February, 1992. We have used tapes of the training since then. In April, 1992 we trained about 100 people on Methods and Tools- had representatives from most departments.

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?

Discrete. Because of time constraints. "TQM is just an additional duty and it really needs to be a dedicated duty position."

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?

One-third of the organization has gotten overview training. 100 people have gotten methods and tools training. "Everyone should have overview training and we really need just-in-time (JIT) training for PATs."

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?

"This was not formally assessed and we based it primarily on HSC guidance."

WHO ASSISTED IN THIS PROCESS?

HSC consultant.

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?

Two. Overview training and methods & tools training.

HOW WAS THAT DETERMINED?

We were the HSC test site for this type of training.

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?

Overview- 3 hours.
Methods and Tools- 2 days.

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?

To give the methods & tools personnel a "train-the-trainer" course so they could conduct classes (chain teaching) when they went back to their departments. "This was a mistake. We clearly should have done JIT training for these courses and the PATs."

WHO DEVELOPED THE TRAINING OBJECTIVE?

The HSC consultant, using us as a testbed.

12) **WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?**
Not a top-down approach because it is stratified at different levels, with a number of gaps between the different levels. Most of the senior leadership went to some form of training.

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?
"The very top leaders weren't really interested in TQM training." Did overview training for everyone to show the cohesion of the MTF.

13) **WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?**
Overview training only.

INTERNAL OR EXTERNAL?
Internal.
WAS THERE MORE THAN ONE TRAINING SESSION?
Just one.

WHAT WAS THE FOCUS OF THIS TRAINING?
Orientation to TQM.

14) **WHAT ROLE IN TQM DOES YOUR CEO PLAY?**
"He is not actively involved, other than as the Chairman of the Board of Directors."

15) **WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?**
Overview training only.

INTERNAL OR EXTERNAL?
Internal.

WHAT WAS THE FOCUS OF THEIR TRAINING?
Orientation to TQM.

16) **DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?**
Not to date.

PATs?

No.

FACILITATORS?
None formally trained.

PHYSICIANS/CLINICIANS?
No.

MIDDLE MANAGERS?
No.

NURSING STAFF?
No.

CUSTOMER RELATIONS?
No.

17) **WHO IS IN CHARGE OF TQM TRAINING?**
The Chief of Quality Improvement and the QI office.

HOW WAS THAT DECISION MADE?
Staff responsibility was given at the Strategic Planning Conference.

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?
Not really selected based on this.

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?
Internal.

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)
Equivocal. There are pros and cons for both.

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
Simple D-Base and word processing programs.

18) **DOES ANYONE TRACK PATs? WHO?**
"We are trying to do this in the QI office, but we aren't capturing all the data."

IF SO, HOW, AND WHAT INFO IS TRACKED?
No formal structure other than the problem, team composition, final report, and follow-up report.

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?
"This is very problematic. You can't really get all the staff involved." We have tried to get civilian representation/lower ranks represented on the Board of Directors (QI council), but were not successful. We still get mostly department heads and senior leaders.

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?
"Our only method would possibly be to look at the Pharmacy PAT and show its cost savings."

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?
None.

WHO MEASURES IT & HOW IS IT <u>QUANTIFIED</u>?

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?
"Zero."

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?
"Our goal was to use the 100 people trained in methods and tools as facilitators. Two of the 100 are actually serving as facilitators." 100 was arrived at by space limits on the training area.

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?)
"Do it because it's of benefit, but its got to happen at the lower levels." Let departments get the successes. "Use 'Champions of TQM' in the command directed groups to get some success stories."

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) Overview training- gave people an idea of TQM.

(2) Increasing awareness of TQM and what can be accomplished.

(3) "We have got SOME true believers in the facility."

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1) "We would use JIT training- Our approach was all wrong."

(2) "Get top-down support."

(3) "Know how to get support when you need it. Know when to say 'We just can't do it with our current resources.'"

(4) I would send the CEO for external training. I would also get senior executives to buy-in and come across with support.

APPENDIX C

CASE NUMBER 2: TQM TRAINING QUESTIONS

FACILITY: Large Veterans Affairs (VA) Medical Center in the Southwest.

POSITION: Chief, Quality Management.

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
The VA as a whole started one and a half years ago. This facility started in October 1992.

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
"Stalled." We have done awareness training and provided it to two-thirds of the workforce. Also did an internal assessment questionnaire, talked to customers, and looked at our processes. The next step is to develop a strategic quality plan.

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
"The Quality Leadership Team (QLT) is the focus of our TQM. However, we weren't given any additional resources, no additional positions, and minimal training funds." The QLT is roughly like the Executive Council. At one time the QLT had 29 members, but now it only has the top six executives of the organization.

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
The Hospital Director is the immediate supervisor of the Chief of Quality Management.

HOW WERE THEY SELECTED?
"The department was previously called Quality Assurance and TQM was given as an additional duty of the re-titled Quality Management Department."

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
There were no resources and the Director decided to give it to Quality Assurance.

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?
The American Productivity and Quality Center (APQC) is the primary contractor for TQM in VA facilities. Went to a week of training there, then went to three weeks training at several other consulting firms.

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?
The program was organized to have APQC provide 18 months of consultation and training for the Quality Management (QM) Department, then have the QM Department become the "internal consultants". APQC was also providing education and consultation to top management during this time.

6) HOW WAS YOUR TQM PLAN DEVELOPED?
By the consultant (APQC).

7) WHO HELPED DEVELOP YOUR TQM PLAN?
APQC.

WERE OUTSIDE CONSULTANTS USED?
Yes.

IF SO, HOW WERE THEY SELECTED?
Selected by VA headquarters (bid contract).

DID YOU USE MORE THAN ONE?
No.

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?
The package for all VA facilities was slightly modified after it was fielded at the Phase I sites. "It was generally a standard package."

WHO HELPED IN THIS PROCESS?
Unknown.

HOW WAS IT APPROVED OR ADOPTED?
Unknown.

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?

Two-thirds of the employees have had an Awareness Training course. "We haven't had a strategic quality plan coordination meeting, but we do have a vision statement. The goal is to take the strategic quality plan and pick 4 or 5 places to put PATs." Hope to soon have a management development training package with TQM training in it.

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?

Continuous.

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?

"We still need to get one-third of the organization Awareness Training, but we need to really re-look how we trained the executive management."

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?

APQC developed the materials, content, and audio-visual presentation.

WHO ASSISTED IN THIS PROCESS?

APQC initially trained all personnel. They then trained four in-house personnel to take this over.

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?

"The only one used so far has been the two hour Awareness Training. We plan to eventually have a four day PAT team leader course, a four day facilitator course, and a five day course for team members."

HOW WAS THAT DETERMINED?

APQC.

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?

(See above)

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?

Awareness training for everyone and JIT for PATs.

WHO DEVELOPED THE TRAINING OBJECTIVE?

APQC.

12) WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?
The consultant recommended a top-down approach. This was rejected and a modified top-down approach was used. Some executive leaders went to training at a Deming course. The Associate Director of the hospital was very involved, but was not supported by everyone else.

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?
"A top-down training approach was rejected because some executives didn't want to devote the time to attend the top-down training."

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?
Attended a four day Deming course and had some other training at VA sponsored meetings. Had a one day in-house orientation by APQC.

INTERNAL OR EXTERNAL?
External.

WAS THERE MORE THAN ONE TRAINING SESSION?
Not really.

WHAT WAS THE FOCUS OF THIS TRAINING?
The Deming course was given by Dr. Deming to a very large group. It focused on TQM principles, tools, and implementation. APQC's course was really an overview of their program and not actual training.

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?
"He is Chairman of the Quality Leadership Team. Unfortunately, this group doesn't meet on a regular basis."

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?
Similar to the CEO training.

INTERNAL OR EXTERNAL?
External.

WHAT WAS THE FOCUS OF THEIR TRAINING?
The same as the CEO.

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?
This is still to be done and hasn't been implemented.

PATs?
(Yes.)

FACILITATORS?
(Yes, and team leaders also.)

PHYSICIANS/CLINICIANS?
There has been consultation and ad hoc/informal training by an external VA physician who is an area consultant.

MIDDLE MANAGERS?
(Yes. Awareness training plus more information.)

NURSING STAFF?
(No.)

CUSTOMER RELATIONS?
(No.)

17) WHO IS IN CHARGE OF TQM TRAINING?
The Chief of Quality Management.

HOW WAS THAT DECISION MADE?
Part of the new job description.

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?
Same as earlier question (#4).

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?
Internal (see question #4).

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
Stubby pencil attendance rosters.

18) DOES ANYONE TRACK PATs? WHO?
"No. Not yet. We had two or three guerilla teams which had some initial success, but it wasn't really tracked."

IF SO, HOW, AND WHAT INFO IS TRACKED?

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?
"I don't really know." You need a broad approach with ongoing awareness training. You should start with service/department teams to realize early benefits. Should then have cross-functional, multi-disciplinary teams. You should use publications, communication channels/newsletters and publicize your successes.

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?
We don't have one, but you should see if actual improvement takes place and if it is sustained.

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?
We will see if the PATs are successful.

WHO MEASURES IT & HOW IS IT <u>QUANTIFIED</u>?
None.

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?
Zero.

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?
We will do JIT.

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?)
"You don't want to do it unless you mean it. If you're satisfied with the status quo, don't attempt a TQM conversion." It takes lots of time and will tax you. You need to believe that you will get positive change from your efforts.

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) Trained two-thirds of the workforce in awareness of TQM.

(2) Put out vision, mission, and local-author articles to the

workforce.

(3) You must use a consultant as the expert for the model, implementation, and how to make it happen. In-house personnel just don't have the same credibility.

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1) Composition of the Quality Leadership Team changed three times. Went from 12 to 29 to 6 members. Gave the perception of chaos and not knowing what you're doing.

(2) Resource management process came up as a question. Staffing study was begun and caused lots of fear in the workforce. Sent the wrong message to employees.

(3) You need to have adequate time and personnel resources to implement TQM. "It can't be a part-time effort or you're doomed."

APPENDIX D

CASE NUMBER 3: TQM TRAINING QUESTIONS

FACILITY: A large county-run medical center.

POSITION: Director of Quality Management.

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
February of 1992.

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
"We are currently stopped at this point, until a budget is developed and approved." We have a plan developed by a multi-disciplinary core group, but it isn't approved by the Board of Directors and is waiting on the budget. We are in the process of developing the budget and have done some training. The hospital vision statement was developed before TQM came to the facility.

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
The TQM structure was directly overlaid on top of the quality assurance (QA) structure. No new organization. The QA committee oversees TQM. The program has not been top down because TQM was demanded by the middle and lower-echelon employees.

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
The Quality Assurance/Quality Improvement Office.

HOW WERE THEY SELECTED?
The QA Director took it on as a JCAHO mandate. It has been an informal process.

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
A need from the QA program and JCAHO mandate.

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?
No formal training when we started. Since then, have attended a very broad range of workshops and seminars.

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?
The focus is on customer satisfaction, with quality improvement and cost containment through better efficiency.

6) HOW WAS YOUR TQM PLAN DEVELOPED?
There was a focus group of 15 people. The Director of QA and Director of Education chose the top guns and lower-level, cross-level personnel. Also chose some physician leaders, some NEGATIVE vice-presidents, outreach clinic personnel, and a finance person for budget support.

7) WHO HELPED DEVELOP YOUR TQM PLAN?
No outside help.

WERE OUTSIDE CONSULTANTS USED?
No.

IF SO, HOW WERE THEY SELECTED?

DID YOU USE MORE THAN ONE?

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?
We developed our own using the focus group.

WHO HELPED IN THIS PROCESS?

HOW WAS IT APPROVED OR ADOPTED?
The CEO got the program from the focus group and then held it for the budget. Once it is budgeted, it will go from the CEO to the Quality/Risk Management Committee and from there to the Board of Directors.

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?
We had a two day workshop to train the Directors, followed by a two day workshop to train supervisors. We then gave a series of eight hour TQM detail classes for all other employees.

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?
Continuous.

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?
About 10% is trained and 90% still need training.

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?
We did an informal assessment through the QA process and also listened to the employees.

WHO ASSISTED IN THIS PROCESS?
No outside assistance. Used people that had been to workshops and volunteered to help.

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?
Three different levels.

HOW WAS THAT DETERMINED?
Planned by the focus group.

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?
Directors- 16 hours.
Supervisors- 16 hours.
All employees- 8 hours.

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?
Train-the-trainer and get the word out to as many people as we could.

WHO DEVELOPED THE TRAINING OBJECTIVE?

12) WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?
Top-down.

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?
"The Directors should have the KASOs (knowledge, abilities, skills, and other attributes) before the employees do."

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?
"He only went to four hours of training because he isn't a believer in TQM."

INTERNAL OR EXTERNAL?
Internal.

WAS THERE MORE THAN ONE TRAINING SESSION?
No.

WHAT WAS THE FOCUS OF THIS TRAINING?
"It was part of the overview and philosophy of TQM."

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?
"He isn't a player. His attitude has been 'Prove to me we need it and that it can work.'"

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?
Four hours of overview and philosophy.

INTERNAL OR EXTERNAL?
Internal.

WHAT WAS THE FOCUS OF THEIR TRAINING?
Same as above.

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?
"We are still in the process of developing these programs."

PATs?

FACILITATORS?

PHYSICIANS/CLINICIANS?

MIDDLE MANAGERS? Yes. 16 hour overview and tools.

NURSING STAFF?

CUSTOMER RELATIONS?

17) WHO IS IN CHARGE OF TQM TRAINING?
It is a joint effort between Quality Management and the Director of Education.

HOW WAS THAT DECISION MADE?
"We were the only volunteers."

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)
Better for in-house because you already know the organization.

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
All we have is stubby pencil right now.

18) DOES ANYONE TRACK PATs? WHO?
Yes. QA process tracks them.

IF SO, HOW, AND WHAT INFO IS TRACKED?
The QA process tracks them with monthly reports.

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?
Through department meetings and having the Directors talk about TQM and set the example.

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?
We set standards for the PAT outcome, such as percentage reduction in medication error rates, and then evaluate the result.

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?
None.

WHO MEASURES IT & HOW IS IT <u>QUANTIFIED</u>?

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?
About five.

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?
Not enough. We would like to get about 100 people trained as facilitators.

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?)

"It's very frustrating to start at the middle. You really need the executive leadership to help break down barriers, but the point to the senior leaders is that it's going forward with or without their support and approval. They need to see that they can't stop it."

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) Getting the TQM message to the lowest levels and improving morale.

(2) "We eliminated the fear of making changes and then getting fired for it." Now there are more risk-takers. Got the departments to open up and work together more often.

(3) Increased employee consciousness of patients and customers. "Sparked awareness in this important area."

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1) "Pull a core group together and put together a plan with a budget first, before any training is conducted."

(2) Get physicians involved sooner in the process. "They should be at the front of the train."

(3)

APPENDIX E

CASE NUMBER 4: TQM TRAINING QUESTIONS

FACILITY: A large Naval Medical Center located in the Northeast.

POSITION: Total Quality Leadership (TQL) Coordinator.

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
"We started in 1988 with training of the Executive Steering Council."

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
"We've been going for awhile. We actually had 'stealth TQM' start back in 1988. This was where some people had learned about TQM and just got so excited that they started teams." After we decided to begin TQM implementation, we flattened the organizational chart and formed the Executive Steering Council (ESC). We then brought in Joseph Juran and his consulting group and trained the ESC. We formed four Quality Management Boards (QMBs) to supervise PATs. They consisted of 8-9 members with at least 1-2 representatives from the ESC on each Board. Then we started working on the strategic plan. We recently revised the strategic plan after looking at our TQL vision, mission, guiding principles, and five goals.

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
"The ESC is the governing body and is chaired by the Commanding General (CEO) and I report directly to him." The four QMBs provide support and guidance to several PATs each.

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
The TQL Coordinator.

HOW WERE THEY SELECTED?
"In the past, I was the head of Quality Assurance (QA) and had moved to another facility to be the Quality Improvement (QI) Coordinator. This position was created and it seemed to be a perfect fit."

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
Unknown, bit believe that experience in the facility and also

with TQM in another facility were determining factors.

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?
Went to a number of courses taught by consultants, a facilitators course, and a course taught by the Naval Medical Quality Improvement (NMQI) office.

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?
"Continuous Quality Improvement (CQI) is the focus on every process, with the outcome of improving quality."

6) HOW WAS YOUR TQM PLAN DEVELOPED?
"The Acting TQL Coordinator along with the ESC developed a timeline with milestones."

7) WHO HELPED DEVELOP YOUR TQM PLAN?
Same as above.

WERE OUTSIDE CONSULTANTS USED?
"Yes, for training, but not to develop the plan."

IF SO, HOW WERE THEY SELECTED?
We used the Juran Institute and NMQI. I'm not sure how they were selected.

DID YOU USE MORE THAN ONE?
Yes.

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?
Basically developed our own.

WHO HELPED IN THIS PROCESS?
The ESC was guided by the Acting TQL Coordinator.

HOW WAS IT APPROVED OR ADOPTED?
The ESC voted on it and adopted by majority vote.

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?

"The ESC and some Department heads have been trained in the Executive Management Course. We are currently training the remaining department and service heads in the Executive Management Course. We are also providing all newcomers with TQL orientation training."

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?

Continuous. Necessary because of personnel rotating in and out.

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?

We don't know because within the organization we're not sure who has been trained.

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?

No real pattern for it at this point.

WHO ASSISTED IN THIS PROCESS?

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?

Two. The ESC got two and one-half days and the Department heads got two days.

HOW WAS THAT DETERMINED?

NMQI made the recommendation.

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?

See above.

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?

This was not formalized, but the real objective was to get a "critical mass" of people trained in the facility.

WHO DEVELOPED THE TRAINING OBJECTIVE?

12) WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?

Top-down.

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?

"You MUST get senior leader commitment to TQM and training is the most effective way to achieve this."

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?
The Commander got the same training as the ESC. This was a 2 1/2 day session with NMQI and a course by Juran.

INTERNAL OR EXTERNAL?
External.

WAS THERE MORE THAN ONE TRAINING SESSION?
Yes.

WHAT WAS THE FOCUS OF THIS TRAINING?
The basic focus was on fundamentals and benefits of TQM, along with mission and vision development.

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?
"He leads the ESC. He comes to all courses and gives a pep talk and most importantly, he incorporates TQM in all speeches, commanders calls etc.."

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?
The same as the Commander. NMQI and Juran courses.

INTERNAL OR EXTERNAL?
External.

WHAT WAS THE FOCUS OF THEIR TRAINING?
Fundamentals/benefits of TQM, along with mission and vision development.

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?
Not really. We are in the process of developing some tailored courses for PATS and lower-enlisted.

PATs? Currently developing a course for PATs.

FACILITATORS?

PHYSICIANS/CLINICIANS?

MIDDLE MANAGERS? Two day department head course.

NURSING STAFF?

CUSTOMER RELATIONS?

17) WHO IS IN CHARGE OF TQM TRAINING?
The TQL Coordinator.

HOW WAS THAT DECISION MADE?
"This was an assigned duty because NMQI couldn't support the facility with all the training we needed."

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?
"Initially external assets were used, but then it evolved to in-house."

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)
Initially contracting out is OK because we didn't have the necessary expertise in-house.

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
No.

18) DOES ANYONE TRACK PATs? WHO?
Yes, the TQL office does.

IF SO, HOW, AND WHAT INFO IS TRACKED?
"The PATs are supposed to send their minutes to the TQL office, but they often don't. The QMB Chairpersons also provide reports and updates to the ESC. If a PAT isn't working/making progress then they are scheduled for a presentation with the ESC."

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?
"The best way is to try and do it through education, expert speakers, and basically EXPOSURE to the program."

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?
We don't really formally measure this.

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?
"We have feedback sheets from each course, but that's all."

WHO MEASURES IT & HOW IS IT <u>QUANTIFIED</u>?

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?
30.

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?
No. We really need about 60.

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?)
"Train first, before you try to solve problems."
"It's critical to get buy-in from middle managers."
"The ESC can only push so much, but you need them pushing. The directors must be the apostles for TQM."
"Front-load the training, before you assign a problem to the PAT."
"Opportunity statements must be well-written so a PAT doesn't get something like 'Try to solve world hunger' that dooms them to failure."

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) Development of the vision, mission, and goals without a lot of direction has been very helpful.

(2) Effective training and course development has been very good.

(3) The Commander really preaches TQM and shows support for the program.

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1) Shouldn't have formed PATs so soon. Would have trained teams before they started.

(2) Wouldn't have formed the QMBs so soon. Should have gotten the ESC more involved and gotten them to realization of what work is involved with the PATs and QMBs.

(3) Should have gotten more training up-front.

(4) We should have had a better understanding of the QMBs role and who has responsibility for what.

APPENDIX F

CASE NUMBER 5: TQM TRAINING QUESTIONS

FACILITY: A large Naval Medical Center in the West.

POSITION: Director of Total Quality Leadership.

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
October 1989.

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
We have a Total Quality Leadership (TQL) mission, vision, guiding principles, and strategic plan.

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
The TQL office is the central point and reports to the Commander (CEO). We have an Executive Steering Council (ESC) which guides and steers the organization in implementation of quality improvement (QI). The ESC is comprised of the Commander, Deputy Commander, and 18 Directors and Deputy Directors. This is basically the senior management of the hospital.

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
The TQL office.

HOW WERE THEY SELECTED?
This was a new office organized when I (the Dir, TQL) arrived. This was directed by the Hospital Commander.

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
Don't really know, but my background is in education and I have served in a number of staff positions.

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?
Was trained by the Navy line in basic and advanced implementers courses. Went to six other seminars in two months. Took two courses on health care TQM taught by physicians from Harvard Medical School.

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?
Two items. 1) Increase the quality of health care treatment.
2) Reduce inefficiency, duplication, and complexity.

6) HOW WAS YOUR TQM PLAN DEVELOPED?
"It was developed by the ESC over six months and then ratified by the department heads in the facility."

7) WHO HELPED DEVELOP YOUR TQM PLAN?
"We did it using training material from Navy line units as the basis. We then brought in consultants from the National Demonstration Project to help refine the program."

WERE OUTSIDE CONSULTANTS USED?
Yes.

IF SO, HOW WERE THEY SELECTED?
By the Commander and the Navy Surgeon General.

DID YOU USE MORE THAN ONE?
Yes.

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?
"We drew from several approaches to develop our own program."

WHO HELPED IN THIS PROCESS?
Director of TQL.

HOW WAS IT APPROVED OR ADOPTED?
Adopted by the Commander, after going through the ESC.

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?
"We are heavily into it." We have a 30% yearly turnover in active duty personnel. So we have an ongoing challenge to keep current. We are currently training senior managers, middle managers, and lower-level personnel.

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?
Continuous because of turnover etc..

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?

We have trained 50%, not counting turnover, but about 50% still need training.

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?

We did an informal internal assessment and then benchmarked against two hospitals in Atlanta and Baton Rouge.

WHO ASSISTED IN THIS PROCESS?

Used two outside consultants to assist in the development of the program.

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?

Five different types:

1) Senior Managers- 18 hours.
2) Middle Managers- 8 to 10 hours.
3) New Employees- 6 to 10 hours.
4) Facilitators- 40 hours.
5) Team Leaders- 24 hours.

HOW WAS THAT DETERMINED?

Used a pilot program to test each level and length of training and its applicability to jobs. There was also an informal feedback mechanism to meet each training group's needs (post-course questionnaire).

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?

See above.

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?

"JIT was the objective because we didn't want to 'train everyone at once'. We wanted to make it applicable to individual work areas".

WHO DEVELOPED THE TRAINING OBJECTIVE?

Used internal resources and education specialists from the Staff Education Department.

12) WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?

Top-down, cascading mode (chain teaching).

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?

"Top-down was selected on the personal recommendation of Dr. Don Berwick (noted TQM author)". This is also in line with the Juran and Deming models.

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?

"He got five days of senior leader training at the Navy Postgraduate School. He also went to two sessions, of three days each, at the National Demonstration Project. There were also a number of other seminars that probably added up to 30 or 40 hours."

INTERNAL OR EXTERNAL?

External.

WAS THERE MORE THAN ONE TRAINING SESSION?

Yes.

WHAT WAS THE FOCUS OF THIS TRAINING?

"Most was specifically targeted for a CEO beginning TQM implementation."

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?

He is the ESC Leader. He opens TQL training sessions. He is the senior member of the TQL Strategic Planning Group. "In general, he sets the tone for TQL in the command and provides the strategic direction and planning which is critical to the process."

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?

All of them went to a three day Senior Managers Training Course and a two day, follow-on session. Some have gone to the facilitator course.

INTERNAL OR EXTERNAL?

The three day course was external. The two day follow-on was internal.

WHAT WAS THE FOCUS OF THEIR TRAINING?

Two-fold objectives:

1) Application of TQM to health care.
2) How to implement TQM in health care.

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?
We have done some tailored/targeted training for specific departments and other areas.

PATs? Yes.

FACILITATORS? Yes.

PHYSICIANS/CLINICIANS? Yes, we are developing a 14 to 16 hour pilot course. The current physician course is part of the Senior Management course. We are currently using special, 8 hour courses for interns and residents.

MIDDLE MANAGERS? Yes.

NURSING STAFF? No.

CUSTOMER RELATIONS? "No. We need to work on this area."

17) WHO IS IN CHARGE OF TQM TRAINING?
Director of TQL.

HOW WAS THAT DECISION MADE?
It is part of the job description.

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?
Internal.

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)
"In the beginning you should hire a contractor to capitalize on their expertise. Later it should be transferred to in-house assets."

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
The Education Department tracks it on the mainframe computer.

18) DOES ANYONE TRACK PATs? WHO?
Yes. The TQL office.

IF SO, HOW, AND WHAT INFO IS TRACKED?

"We are developing a DBASE program to assist us with this. We are currently having PATs send copies of their minutes to the TQL office."

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?

TQM must be announced to everyone by the Commander. You must also provide both Senior Management training and employee training that can be used in their daily workplaces.

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?

None at this time. We are starting to address this.

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?

"I have been asked to come on-line with a formal system."

WHO MEASURES IT & HOW IS IT <u>QUANTIFIED</u>?

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?

45.

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?

Yes. We looked at the number of teams that could be supported and it seems to fit. We have 40 active teams, but four people are facilitating two teams.

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?)

1) "Underestimated resistance from middle management; they felt very threatened."

2) "TQM requires tremendous amounts of up-front training. The senior managers must be well grounded in TQM early in the process."

3) "It is a constant struggle to implement TQM in a culture that thrives on crisis management."

4) "The greatest cost of TQM is time, not money. You need to be prepared for this."

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) Our overall training is good, but our facilitator training is very good.

(2) The TQL office has done a good job of assisting and mentoring the PATs.

(3) We have been very good at communicating with the Commander and keeping him informed.

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1) Do the middle manager's training MUCH earlier in the process.

(2) Spend more time on "pilot PATs" and preparing the teams.

(3) Make the charter for the teams more focused and don't give them huge projects like "solve telephone access".

APPENDIX G

CASE NUMBER 6: TQM TRAINING QUESTIONS

FACILITY: A large Army Medical Center in the Northwest.

POSITION: Quality Assurance/Quality Improvement Coordinator

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
The program was formalized in August 1992.

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
We have done the vision statement and are working on the process. Some training has been done. The "one-year plan" will be completed in August.

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
The Quality Council has five members of the command group, along with other representatives from the facility, and reports to the Commander. The Commander forwards monthly summaries from the Quality Council to the Executive Committee.

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
Quality Assurance/Quality Improvement (QA/QI) Coordinator.

HOW WERE THEY SELECTED?
Selected from within the institution by the Commander. Basically a new position.

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
Don't really know, but had experience developing a model for the Department of Surgery.

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?
Training was mostly local seminars and an Army QA meeting.

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?

Overall we wanted to get TQM implemented first, then follow-up with continuous quality improvement (CQI). There were several tenets that we adopted: Communication throughout the organization. Decisions based on data. Demonstrate high quality of services. Customer focus in all processes. Want to maintain quality, become more efficient, and use fixed resources better.

6) HOW WAS YOUR TQM PLAN DEVELOPED?

"It is still evolving. We looked at three options for training. 1) Internal assets 2) Outside consultants and 3) Customize and use the best of both other approaches. A focus group was formed to bring TQM to the hospital and looked at the three options."

7) WHO HELPED DEVELOP YOUR TQM PLAN?

TQM focus group. This started with 20 people and was later pared to 12. The group met weekly from August 1992 until January 1993. This group then made recommendations to the Quality Council.

WERE OUTSIDE CONSULTANTS USED?

"Yes, we used three. 1) We brought in a well known physician to talk to the teaching chiefs about making TQM work. 2) We had a consultant develop the facilitator course and facilitate the first few courses. 3) We brought in a hospital commander who had already implemented TQM."

IF SO, HOW WERE THEY SELECTED?

The focus group and QA/QI Coordinator looked at a number of recommended consultants. They narrowed the recommendations and set up interviews with the command group.

DID YOU USE MORE THAN ONE?

Yes. (see above)

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?

"We selected an 'eclectic program' design so that our process is a hybrid developed to fit this hospital. No one single program could work."

WHO HELPED IN THIS PROCESS?
The TQM focus group and the QA/QI Coordinator.

HOW WAS IT APPROVED OR ADOPTED?
The focus group used a "consensus method" to arrive at recommendations and then presented those to the Commander. The Commander approved all recommendations.

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?
Over 30% of the personnel have received familiarization training. This will conclude with all personnel trained in August 1993 and then all incoming personnel will get familiarization training to maintain the training base.

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?
Continuous. Incoming personnel make this necessary, along with personnel who need refresher training.

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?
Still have 70% that need training.

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?
"The QA/QI office sent a recommendation to the focus group and then the focus group did a slight modification to fine-tune it."

WHO ASSISTED IN THIS PROCESS?
(see above)

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?
Really were five different types:
1) Command training- unknown length, but it is ongoing.
2) Department chief training- 16 hours formal and 16 hours ad hoc.
3) Staff training- 8 hours.
4) Manager training- 32 hours.
5) Facilitator training- 48 hours.

HOW WAS THAT DETERMINED?
A proposal was sent through the focus group to the Commander.

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?
(see above)

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?
"JIT coupled with job experience. The courses all use the same eight hour core and then use 'building blocks' to further tailor the courses."

WHO DEVELOPED THE TRAINING OBJECTIVE?
We used a consultant to assist us in developing this approach.

12) WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?
"It is mostly top-down, but is what I would call 'a different paradigm.'" This ensures maximum fit with the facility.

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?
(see above)

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?
"He had a lot of training before his arrival, but needed to internalize it at the organizational level."

INTERNAL OR EXTERNAL?
Unknown.

WAS THERE MORE THAN ONE TRAINING SESSION?

WHAT WAS THE FOCUS OF THIS TRAINING?

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?
"The entire command group teaches TQM courses in the hospital. The Commander comes to EVERY class and gives about 30 minutes of opening remarks and then answers questions."

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?
They attended an eight hour retreat and have done a lot of readings. Don't know the rest because most were already trained.

INTERNAL OR EXTERNAL?

WHAT WAS THE FOCUS OF THEIR TRAINING?

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?

PATs? JIT training for PATs that want the additional training.

FACILITATORS? Yes.

PHYSICIANS/CLINICIANS?

MIDDLE MANAGERS? Yes, for all administrative managers/physician managers/nurse managers.

NURSING STAFF?

CUSTOMER RELATIONS?

17) WHO IS IN CHARGE OF TQM TRAINING?
The QA/QI Coordinator oversees a training facilitator who is a civilian contractor.

HOW WAS THAT DECISION MADE?
More time-efficient to use an external contractor to do the hands-on training.

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?
The contractor has been doing TQM training for 10 years.

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?
External, because of time utilization.

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)
"There isn't a 'one best answer', but the best use of time, resources, and money was to get the contract facilitator. The facilitator provided a custom product and had credibility, success stories, and experiences to share and draw upon."

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
Yes. Information management built a database for the QA/QI office.

18) DOES ANYONE TRACK PATs? WHO?
Yes. The QA/QI office.

IF SO, HOW, AND WHAT INFO IS TRACKED?
"The PATs forward a one-page agenda/minutes record of each meeting to the QA/QI office. Data from the process study is included in summary/synopsis form. They end the process with a FOCUS-PDCA presentation."

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?
Get broad exposure from a variety of sources and use the whole bag of tricks.

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?
Using internal benchmarking and will soon begin periodic re-assessments. "One indicator is that QA is merging with QI on its own."

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?
"We ask for written and verbal feedback in the courses."

WHO MEASURES IT & HOW IS IT <u>QUANTIFIED</u>?
Not really formalized.

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?
24.

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?
Yes, because the "guerilla PATs" out in the departments don't use this pool of facilitators.

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?)
1) Communication is critical. Get the word out.
2) It is a slow process, so you must get people "on board" before trying to run to TQM.
3) Achieve consensus on decisions.
4) Get the command group on the Quality Improvement Council.
5) Have the commander informed and involved with training sessions

and doing training.

"KEY: There is no 'one right way' to do TQM implementation."

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) Focus group.

(2) The format of the training was interactive and was a real value added. Making the training a living model was a very good idea.

(3) Communication at all levels and keeping people informed so they know about TQM and feel like it is theirs.

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?
No real system errors.

(1) The message was that "everyone will be trained", but we should have included more nursing supervisors in the executive/manager training.

(2)

(3)

APPENDIX H

CASE NUMBER 7: TQM TRAINING QUESTIONS

FACILITY: A large Army Medical Center in the Northeast.

POSITION: Director of TQM and Strategic Planning.

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
July 1991.

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
Have done vision statement, have nine active PATs, and the training program has been instituted.

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
We have a Director's Team composed of the Executive Committee with the Chief of Medicine, Chief of Surgery, and Chief of TQM. We also have a Production Team which is composed of nine people and represents a cross-section of the facility. The Production Team meets weekly and does the day-to-day oversight of TQM.

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
The TQM office works for the Director of Regional Affairs, who works for the Commander (CEO).

HOW WERE THEY SELECTED?
They created a new position and selected me based on experience, interest, and background.

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
Unknown.

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?
Went to a one week conference at the Institute of Healthcare Improvement, HSC training, and a number of other conferences.

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?
Cost, quality, and access.

6) HOW WAS YOUR TQM PLAN DEVELOPED?
"We don't have a formal plan." The Production Team oversees the program and the Director's Team provides guidance.

7) WHO HELPED DEVELOP YOUR TQM PLAN?
No formal plan.

WERE OUTSIDE CONSULTANTS USED?

IF SO, HOW WERE THEY SELECTED?

DID YOU USE MORE THAN ONE?

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?
No formal plan, but haven't used any consultants.

WHO HELPED IN THIS PROCESS?

HOW WAS IT APPROVED OR ADOPTED?

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?
We have trained over 1000 personnel.

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?
Continuous.

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?
1000 are trained, but 9000 still need training, or the rest of the organization.

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?
We did it on our own. We did one internal assessment of the organization.

WHO ASSISTED IN THIS PROCESS?
Two hospital staff members.

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?
Nine formal and two informal.

1) Executive- 2 days.
2) NCO and Mid Mgt- 2 days.
3) Basic TQM Skills- 2 days.
4) Customer Service- 1 day.
5) Interpersonal Skills- 4 hours.
6) Statistical Process Control Tools- 3 days.
7) Awareness- 90 minutes.
8) PAT JIT Training- 3 hours.
9) Facilitators and Trainers- 5 days.

Informal training consists of "Quality Forums" for all PATs to meet and discuss current issues for one day and a "Basic Course for Intact Work Groups" which assists department groups with daily activities.

HOW WAS THAT DETERMINED?
The TQM Director developed the idea for the training levels and the Production Team then refined the plan. The plan was then presented to the Director's Team where it was approved.

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?
(See above)

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?
"We want to get everyone awareness trained and get PATs trained JIT. Another big objective is executive training and getting them to support TQM." We also want to train all incoming employees on familiarization with TQM.

WHO DEVELOPED THE TRAINING OBJECTIVE?
It was the same process.

12) WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?
Top-down, because executives need to train first, then train the PATs. The follow-on is to then do customer service training.

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?
"He hasn't really gotten any since his arrival."

INTERNAL OR EXTERNAL?

WAS THERE MORE THAN ONE TRAINING SESSION?

WHAT WAS THE FOCUS OF THIS TRAINING?

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?
"He heads the Director's Team."

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?
"Two days for department/service chiefs and directors/assistant directors. All O-5 (LTC) and above and GS-13 and above go through this."

INTERNAL OR EXTERNAL?
"George Washington University taught the first two courses and now the TQM Director teaches the course." It is a lesson plan that was refined for the internal class.

WHAT WAS THE FOCUS OF THEIR TRAINING?
Several different parts.
1) Concepts of TQM
2) TQM Tools
3) TQM Teams (PATs)
4) TQM overview in this hospital

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?

PATs? Yes.

FACILITATORS? Yes.

PHYSICIANS/CLINICIANS? Yes. A four hour course on interpersonal skills for physicians and clinicians.

MIDDLE MANAGERS? Yes.

NURSING STAFF? No. They go to the Mid Mgt course.

CUSTOMER RELATIONS? Yes.

17) WHO IS IN CHARGE OF TQM TRAINING?
The Director of TQM.

HOW WAS THAT DECISION MADE?
Part of the job description.

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?
Nothing special. Background is organizational effectiveness.

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?
Internal asset was used because of money and the Commander's confidence in abilities.

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
There is a Civilian Personnel Office database which tracks civilians.

18) DOES ANYONE TRACK PATs? WHO?
Yes. The TQM office.

IF SO, HOW, AND WHAT INFO IS TRACKED?
"There is a monthly report required from each team listing milestones and the progress toward those milestones." There is also a monthly meeting with all facilitators and a weekly meeting of representatives from all teams.

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?
"Training."

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?
Don't really have a method. In some ways, use the results from the PATs.

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?
"There is a post-course survey."

WHO MEASURES IT & HOW IS IT QUANTIFIED?

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?
42.
IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?
"Yes, it would be if they were all good." Feel that they need more facilitators and a better selection of personnel so you don't waste your time training someone who is no good. "The question you should ask to select facilitators is 'Would you hire this person to do the job in the private sector.'"

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?)
1) Top management support.
2) JIT training.
3) Physician involvement.
4) Resourcing- you need your own budget.

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) Structure of the program is sound.

(2) PATs are working well.

(3) The 10 different, tailored training programs has been a big plus. Allows us to effectively focus the training on a target group.

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1) Too many PATs formed at the start, before we knew what we were doing.

(2) Need better selection of trainers (for chain-teaching) and facilitators.

(3) Need to get sufficient resourcing for the program, without having to go begging for everything.

APPENDIX I

CASE NUMBER 8: TQM TRAINING QUESTIONS

FACILITY: A medium size Air Force Medical Center in the Midwest.

POSITION: Director of TQM Operations

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
Early 1989.

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
"We are still in the infancy of the process. From 1989 to 1991 we made a lot of mistakes. In '91 we more or less started over to get a fresh perspective." The basic training requirements will be done by next year. Turnover has caused problems because 30% of the military personnel rotate each year.

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
The Quality Council is composed of 15 members- basically the executive committee. The TQM office has three coaches and facilitates the TQM process. We rely on Quorum Healthcare for external consultation. The Director of TQM reports directly to the Commander.

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
The Deputy Commander for Administration oversees the program, but doesn't rate the Director of TQM.

HOW WERE THEY SELECTED?
Had a lot of formal training and was interested in the job.

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
1) Formal training
2) Right personality
3) Wanted the job

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?
Air Force Command had the Center for Quality Education. Took three courses there. Then went to training sessions at the Hospital

Corporation of America, Quorum Healthcare, and Organizational Dynamics Incorporated- GOAL QPC.

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?

"The focus is to facilitate the organizational transformation to get a culture of collaboration." Want to get cross-functional working relations and get ideas working in the workplace. "Use matrix teams of physicians, nurses, NCOs, and administrators to solve problems."

6) HOW WAS YOUR TQM PLAN DEVELOPED?

"We are still working on developing it." The Commander and Quality Council give the organizational vision/direction and the TQM office figures out how to get it done at the departmental level.

7) WHO HELPED DEVELOP YOUR TQM PLAN?

The Quality Council and the TQM office. The TQM Director was the focus of developing the plan.

WERE OUTSIDE CONSULTANTS USED?

Quorum Healthcare.

IF SO, HOW WERE THEY SELECTED?

They (Quorum) have a Deming-based approach and the Quality Council liked it. "Quorum is one of the few consultation groups that was healthcare-based."

DID YOU USE MORE THAN ONE?

No.

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?

"We developed our own based on the Quorum counsellor's recommendations."

WHO HELPED IN THIS PROCESS?

The TQM office and the Quorum counsellor.

HOW WAS IT APPROVED OR ADOPTED?

The Quality Council approved it.

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?

We have a three day manager-supervisor course taught in-house. We also conduct a one hour overview class for all newcomers and we are developing refresher workshops.

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?

Continuous.

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?

100% of the organization has had orientation training. 65% have gotten other training, but about 30% of the personnel need the manager's course.

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?

"It was a fluke." The TQM Director went to Quorum and had them build the course specifically for us. This was based on a gut feeling that it was the right thing to do.

WHO ASSISTED IN THIS PROCESS?

Quorum and also the Associate Administrator of the hospital.

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?

Manager/Supervisor Course - Three days.
Overview - One hour.
SPC Tools - Four hours.
PAT Skills - Four hours.
Facilitator Course (Consultant taught) - 40 hours.

HOW WAS THAT DETERMINED?

"Through a series of off-site visits and also conferences between the TQM staff."

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?

(See above)

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?

We started with a "shotgun blast" approach, but now we are trying to go to JIT. We saw this need when 40 of 56 facilitators had to go through refresher training.

WHO DEVELOPED THE TRAINING OBJECTIVE?
We assessed the TQM office.

12) WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?
"Primarily top-down. Senior leaders must set the example, so we have them teaching classes. This means that they've got to have the training first."

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?
(See above)

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?
He did a lot of advance reading before taking command. After taking command, he went to a four day course taught by Quorum and a two day course by Deming.

INTERNAL OR EXTERNAL?
External.

WAS THERE MORE THAN ONE TRAINING SESSION?
Yes.

WHAT WAS THE FOCUS OF THIS TRAINING?
Getting him to understand TQM philosophy, the model of Goal-QPC, different approaches to TQM, and why we use the Deming approach.

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?
"He is 'The Champion' for the entire facility and serves as a focal point for the entire facility."

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?
They initially went to either the Quorum or Deming seminars. Now we are only using the Deming seminar because of a price break and because of its utility.

INTERNAL OR EXTERNAL?
External.

WHAT WAS THE FOCUS OF THEIR TRAINING?
To get the Deming philosophy.

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?

PATs? We don't recommend external training. It works better to get it JIT from the facilitator.

FACILITATORS? Yes.

PHYSICIANS/CLINICIANS? No.

MIDDLE MANAGERS? Yes.

NURSING STAFF? No.

CUSTOMER RELATIONS? No.

17) WHO IS IN CHARGE OF TQM TRAINING?
The Director of TQM.

HOW WAS THAT DECISION MADE?
That is the central point for TQM.

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?
Internal.

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)
"Because of manpower regulations it was easier to take a military person out-of-hide."

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
We send stubby-pencil rosters to the computer center and they put it on the mainframe.

18) DOES ANYONE TRACK PATs? WHO?
"We just started tracking them." The Deputy Director for TQM is responsible for tracking PATs.

IF SO, HOW, AND WHAT INFO IS TRACKED?
"We track the following things: who the leader is, the process

they are studying, where they are in the process, what tools/model they are using, and do they need help."

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?
"Get the physicians 'bought-in' and actively involved and then let them run with it."

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?
None, currently. We are trying to develop something. We are looking at technical outcome, access, and delivery of care.

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?
We don't really do this.

WHO MEASURES IT & HOW IS IT QUANTIFIED?

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?
56, but 40 required retraining.

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?
No. We would like more. Some facilitators are doing multiple teams.

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?)
"It's OK to make mistakes and take your time. It won't happen for you overnight, but keep plugging anyway."
"It's OK to ask why."
"It's OK to step back and get a new perspective."

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) Gotten awareness that customers aren't JUST patients, because we're customers too.

(2) Some small projects can have big payoffs. $50,000 a year waste in the pharmacy was solved by fax machines on the wards. The error rate

dropped from 95% to 1%.

(3) It's OK to challenge/disagree and look anew at processes.

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1) We need to stop trying to do things with the "old frame of mind" while using the new process.

(2) Resourcing has been a problem. We had to take it all out of hide and we didn't have the money we needed for training and tools. This caused a lack of commitment. The TQM office eventually got our own budget, but it didn't work until then.

(3)

APPENDIX J

CASE NUMBER 9: TQM TRAINING QUESTIONS

FACILITY: A large Air Force Medical Center in the Southwest.

POSITION: Joint interview with the Deputy Commander for Administration and the Director of Quality Improvement.

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
January 1992.

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
We have formed a Quality Council and started 20 PATs. Two PATs have been completed and were successes. We have done facilitator training and orientation training. We will be starting an organizational assessment soon.

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
The Quality Council is the center of the program. They bolster each PAT with a "PAT Support Group" which has two Quality Council representatives. The Quality Improvement Office fosters the entire program and advises the Quality Council.

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
Quality Improvement Office, composed of two military and one civilian employee, works for the Commander and advises/coaches the Quality Council.

HOW WERE THEY SELECTED?
They were all volunteers.

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
"They had extensive TQM training and actually sought the job."

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?
"The training has been continuous and ongoing." The focus has been on the Deming method and SPC tools.

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?

"We are committed to improving the processes within our facility. In this way we will meet three goals: 1) Improve quality 2) Improve accessibility 3) Cost containment. The three cornerstones of this are 1) process improvement, 2) using facts and simple statistical tools to make decisions, and 3) continuous improvement in all areas."

6) HOW WAS YOUR TQM PLAN DEVELOPED?

It was modeled along the lines of the Hospital Corporation of America program. We purchased the royalties to this program and then refined it to fit the facility. For example, their six day course was shortened to three days. This molded the program to better fit our culture and climate.

7) WHO HELPED DEVELOP YOUR TQM PLAN?

The Quality Council and internal quality staff.

WERE OUTSIDE CONSULTANTS USED?

Not initially.

IF SO, HOW WERE THEY SELECTED?

DID YOU USE MORE THAN ONE?

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?

"We took the Hospital Corporation of America (HCA) package and then modeled it and adapted it to fit the facility."

WHO HELPED IN THIS PROCESS?

The Executive Council/Quality Council and a couple of internal staff.

HOW WAS IT APPROVED OR ADOPTED?

We asked for consensus at all meetings and required a "body language" vote (thumbs up/thumbs sideways/thumbs down) on each issue. "We tried to look at the 10% of the small issues which cause problems."

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?

We are really just starting.

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?

"It is a continuous process which will cascade from the upper levels of management to the lowest levels of the organization." The Commander, Chief Nurse, and the Deputy Commander for Administration (DCA) all teach TQM and are sought after to give classes. The executive leaders live quality and process improvement. We also visit sections to sense the organizational climate for quality and talk about quality.

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?

Only 25 of 4500 employees have had formal training. The short-term goal is to get the Quality Council completely trained. The three year goal is to get 100% of the employees "familiarization training".

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?

"We aren't really that far along." We don't think that you need a 100% assessment of the organization to start the training program.

WHO ASSISTED IN THIS PROCESS?

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?

We are looking at what will probably be six types/levels of training. Several of the courses will be taught just-in-time (JIT) to maximize the training retention and value.

1) Intensive training for the Quality Council that is continuous. This will probably be one or two days per quarter.
2) Facilitator Training - 5 days.
3) PAT Leader (JIT)- 5 days.
4) PAT Member (JIT)- 3 days.
5) Statistical Process Control (SPC) Tools - 5 days.
6) Orientation Training - 1 or 2 hours.

HOW WAS THAT DETERMINED?

"These were modeled after HCA guidelines."

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?

(see above)

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?

"JIT is the overall training objective." JIT must be carefully orchestrated to be successful. You also need "owner" involvement to help

the PAT and improve the process.

WHO DEVELOPED THE TRAINING OBJECTIVE?
"It hasn't been approved, but it is based on previous experiences."

12) WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?
It is basically top-down.

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?
"In another facility we saw a case where an Airman usurped the 'referent knowledge' and position of the middle managers. It was a big mistake to train the junior employees before the senior employees. Because of this, we have been approaching training in a top-down fashion."

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?
The DCA set times for training and attended the training with the Commander. It has been a top priority.

INTERNAL OR EXTERNAL?
External at HCA in Nashville.

WAS THERE MORE THAN ONE TRAINING SESSION?
There have been two sessions lasting three days each.

WHAT WAS THE FOCUS OF THIS TRAINING?
It started with an explanation of what TQM is and progressed to using SPC tools. It then gave specific examples of TQM implementation in different hospitals.

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?
The Commander heads the Quality Council and commissions all PATs. He will teach some courses and open/close all TQM courses. "There is an obvious commitment of his time and effort. The Commander is fond of saying that when it comes to TQM 'you can buy-in, or die-in' and also, 'you can get on the bus, or get under it.'"

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?
Most have had the same HCA course as the Commander (two sessions of three days each), but we are really just starting.

INTERNAL OR EXTERNAL?
External.

WHAT WAS THE FOCUS OF THEIR TRAINING?
"The same as the Commander."

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?
"You want to get a commitment from each person before they attend that they will use the TQM tools." The training is still being formulated, but we have decided to conduct a number of different courses.

PATs? "Yes. The training standard will be to give this JIT. We want the team leader to be the 'owner' of the process being studied."

FACILITATORS? Yes. We want the facilitator to be from a section outside the process.

PHYSICIANS/CLINICIANS? "No. We want to include clinicians in early TQM training, but the same principles of TQM apply to clinicians and administrators. The importance of this is to have clinician involvement."

MIDDLE MANAGERS? Not really a special training course because cascading training will dictate how much is taught at each level.

NURSING STAFF? No.

CUSTOMER RELATIONS? "The Director of Patient Relations is on the Quality Council and will decide how this training will be done."

17) WHO IS IN CHARGE OF TQM TRAINING?
The Quality Council and the Director of Quality Improvement (QI).

HOW WAS THAT DECISION MADE?
"The Director of QI is the executor of the Quality Council."

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?
They were serving as a staff nurse and expressed an interest in doing this job.

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?
Internal.

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)
It is really personality dependent. "It would be very tricky to allow the Quality Assurance Director to become the TQM Director."

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
The only DBMS tool we use is Wordperfect DBASE.

18) DOES ANYONE TRACK PATs? WHO?
Yes. The Director of TQM.

IF SO, HOW, AND WHAT INFO IS TRACKED?
Basic information like the PAT name, members, leader, facilitator, what SPC tools they are using, and minutes of their meetings.

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?
"The Commander's words speak loudest. His involvement with teaching, visiting the staff at work, going to the midnight staff meeting, and so on, does more than any formal training course to get people involved and committed. From his actions, we see people lobbying to be on PATs because they want to be 'team players' and get the Commander's rewards."

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?
We look at SPC charts, not the number of teams. We plan to evaluate whether TQM is having a lasting impact on the organization and see if improvements are sustaining themselves.

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?
"What have people done after their training."

WHO MEASURES IT & HOW IS IT <u>QUANTIFIED</u>?
No formal program.

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?
15.

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?
Not really enough. We think that we need about 50 facilitators, which is an arbitrary number.

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?) NOTE: This includes lessons from past assignments.

1) You've got to start at the top.
2) Cascade your training.
3) Train before implementing.
4) Do SPC training early in the process.
5) Use one standard approach in both your process and your training.
6) You've got to have the "buy-in or die-in" approach.
7) Total senior staff buy-in is critical.
8) You've got to integrate TQM into the corporate vision.
9) Your total business strategy should include TQM as an integral part.
10) Admit mistakes. Without this you don't have credibility.
11) You should have a well publicized "Quality Bill of Rights."
12) However, NO SLOGANS.
13) No flavor of the month.
14) Establish a recognition program that means something to the employee, not just a piece of paper.

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) We are successfully changing the hospital culture to TQM.

(2) We are improving the technical quality of care delivered.

(3) We are containing costs.

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1) Should not have cascaded training to middle management until senior management was thoroughly trained and demonstrating TQM in their daily practices.

(2) Training more senior people before junior people are trained.

(3) Planning for JIT training. This is critical.

APPENDIX K

CASE NUMBER 10: TQM TRAINING QUESTIONS

FACILITY: A medium size, HMO-based medical center in Hawaii.

POSITION: Manager of Quality Support Services.

1) HOW LONG HAS YOUR ORGANIZATION BEEN IN ITS TQM PROCESS/DATE STARTED?
We officially began in April, 1991.

2) WHERE ARE YOU IN THE PROCESS (VISION STATEMENT/MISSION DONE)?
"We are still in awareness training and knowledge gathering. We are becoming more customer focused and data focused, but still have lots of room for improvement."

3) HOW IS YOUR TQM PROGRAM ORGANIZED?
The Quality Council (QC) is at the head of the program. "I spend about 50% of my day on the TQM effort." I also supervise the four person Quality Improvement Section, who conducts the bulk of our TQM training. This is done through the Human Resource Management Section, who oversees internal training. "The Regional Manager and the Regional Medical Director supervise my section and I report to them."

4) WHO/WHICH STAFF SECTION IS RESPONSIBLE FOR TQM?
"Quality is everyone's job. That is one of our objectives, but Quality Support Services provides TQM training and supports the Quality Council."

HOW WERE THEY SELECTED?
"I volunteered for the job and there were also natural linkages in what we were already doing." Human Resource Management also had some ties, but it has worked better to put TQM under this section. "We already had responsibility for industrial engineering and information technology, so this optimized our systems."

WHAT CRITERIA WERE USED IN THE SELECTION PROCESS?
(see above)

HOW WERE THEY TRAINED AND WHAT WAS THE FOCUS OF THEIR TRAINING?

"I started with about a month of reading and then began visiting other local organizations to look at their TQM programs." I went to a 10 day Navy TQM course and had three different consultant courses that lasted one day each. "I used an eclectic approach so I could pick and choose the best parts from each of these programs."

5) WHAT IS THE FOCUS OF YOUR TQM PROGRAM/PROCESS?

"Increasing customer satisfaction and retaining all members and employees is our whole 'big picture' goal. We've asked the staff to cut things that weren't valuable to the customers, especially in improving access to routine care." We are now integrating Quality Improvement into the Quality Assurance program and using TQM as a bridge in this transition.

6) HOW WAS YOUR TQM PLAN DEVELOPED?

We reviewed a lot of plans from other hospitals. Based on this, we then made some draft recommendations, got further guidance from the Regional Supervisors (CEOs) and then presented the final product to them for approval. We would now like to make it more of the "Quality Council's Plan" rather than an executive's plan.

7) WHO HELPED DEVELOP YOUR TQM PLAN?

"The Quality Support Services staff and I."

WERE OUTSIDE CONSULTANTS USED?

No.

IF SO, HOW WERE THEY SELECTED?

DID YOU USE MORE THAN ONE?

8) DID YOU ADOPT A "PACKAGE PHILOSOPHY" OR DEVELOP YOUR OWN?

"We developed our own 'eclectic program' which was tailored to our specific needs."

WHO HELPED IN THIS PROCESS?

The two Regional Managers and an ad hoc Quality Resource Group composed of a human resource manager, industrial resource manager, and a

quality improvement manager.

HOW WAS IT APPROVED OR ADOPTED?
The Regional Managers approved the plan and then used it as a guideline to form the Quality Council.

9) WHERE ARE YOU IN YOUR TQM TRAINING PROCESS?
The Quality Resource Group is developing one model for training which will encompass Quality Improvement, Quality Planning, and Quality Assurance. It will use the same terminology and tools for all these programs and better standardize our training.

IS THIS PROCESS CONTINUOUS OR DISCRETE, AND WHY?
"It must be continuous, because turnover and shift workers are a never ending problem."

HOW MUCH OF THE ORGANIZATION IS TRAINED/NEEDS TRAINING?
"All executives have been trained and by the end of the year (1993) we will have 50% of the middle managers trained." 200 people have been on PATs, but very few physicians have been through training or been on PATs. "We have NOT wanted 'blanket training' for TQM familiarization.

10) HOW WAS YOUR TQM TRAINING PROGRAM FORMULATED (INTERNAL ASSESSMENT)?
"We used a quality of worklife survey to assess the employees and make baseline evaluations on our needs."

WHO ASSISTED IN THIS PROCESS?
The Quality Manager and a survey from the Northwest Region.

11) HOW MANY LEVELS/TYPES OF TRAINING WERE USED?
"There wasn't really a formal plan for this, but we ended up with six types of training."

1) Senior Managers - two days and supplemental training at Quality Council meetings.
2) Middle Managers and Supervisors - two days of awareness and roll-out training.
3) PAT Training - five days.
4) Quality Improvement Training - three days.
5) Quality Planning Training - three days.
6) Daily Management Course - four days.

HOW WAS THAT DETERMINED?
We borrowed from things published in other programs. We also assessed the training goals and the resources for training, along with the cost of training.

HOW MANY HOURS WERE TRAINED AT EACH LEVEL?
(see above)

WHAT WAS THE TRAINING OBJECTIVE (Just In Time)?
It is different for separate groups.
Senior managers - Teach them how to act and talk TQM.
Teams - Teach them how to look at TQM problems, how to use the tools, and how to be effective team members.
Middle Managers - Teach them about customers and problem solving by using TQM tools.

WHO DEVELOPED THE TRAINING OBJECTIVE?
It isn't really formalized.

12) WHAT TRAINING MODALITY (i.e. TOP-DOWN) IS USED IN YOUR PROCESS?
Top-down.

IF TOP-DOWN/CONCURRENT/BOTTOM-UP, WHY?
"Behaviors which you want to encourage in lower level personnel will get 'knocked down' if upper level management doesn't understand TQM and how it works."

13) WHAT TRAINING DID YOUR CEO GET AND WHO SELECTED IT?
The CEOs had three half-day sessions with consultants and a three day TQM conference on the mainland.

INTERNAL OR EXTERNAL?
External.

WAS THERE MORE THAN ONE TRAINING SESSION?
Yes.

WHAT WAS THE FOCUS OF THIS TRAINING?
We tried to get a general orientation to TQM and how to implement it.

14) WHAT ROLE IN TQM DOES YOUR CEO PLAY?

"The CEOs have to keep the program going, remain steadfast, and always encourage people toward TQM. They do lots of ceremonies, thread TQM into all their activities, and 'walk the talk' for the institution." They go to training sessions to give pep talks and have a "shadow program" for senior managers. This lets a lot of people see just how involved they are in TQM. Another interesting aspect of the relationship between TQM and senior executives is the "vicious reality" program. This program gives subordinates the opportunity to anonymously (or by name) rate the executive and how well the executive is meeting the needs of the subordinate. "It has really been an eye opener for me to get my evaluation forms back."

15) WHAT TRAINING DID YOUR SENIOR EXECUTIVES GET?

They all got two days of training on defining the TQM vision, mission, goals, and group dynamics. They also got one day of "TQM Awareness for Senior Managers" taught by the Juran Institute.

INTERNAL OR EXTERNAL?

External.

WHAT WAS THE FOCUS OF THEIR TRAINING?

The basic concepts which were emphasized included:

1) Changing the roles of management.
2) The different phases of organizational transition and what Senior Management can do to support the TQM process.
3) Customers and maintaining a customer focus.

16) DO YOU HAVE ANY SPECIAL TRAINING PROGRAMS FOR SELECTED GROUPS?

PATs? Yes. We send the entire PAT to training at the same time.

FACILITATORS? Yes. We send the facilitator and team leader to additional training.

PHYSICIANS/CLINICIANS? No.

MIDDLE MANAGERS? Yes.

NURSING STAFF? No.

CUSTOMER RELATIONS? No.

17) WHO IS IN CHARGE OF TQM TRAINING?
Quality Support Services.

HOW WAS THAT DECISION MADE?
We had the staff and it went with the job.

WHAT WERE THEIR QUALIFICATIONS AND LEVEL OF TRAINING?

WAS AN INTERNAL OR EXTERNAL ASSET USED & WHY?

(BETTER TO HIRE IN-HOUSE TRAINING COORD OR OK TO CONTRACT/HIRE OUT)

DO THEY USE ANY SOFTWARE/DBMS TOOLS TO TRACK TNG? WHAT KIND?
Yes. We use a commercial product called "Teammate".

18) DOES ANYONE TRACK PATs? WHO?
Yes. Quality Support Services.

IF SO, HOW, AND WHAT INFO IS TRACKED?
The Teammate program tracks a lot of detailed information. We also require PATs to send the minutes of their meetings to Quality Support Services. The Quality Council monitors and supports PATs by sending "mini-council" sponsors (three representatives to each PAT) to occasionally visit PAT meetings.

19) WHAT IS THE BEST WAY TO GET ALL THE STAFF INVOLVED?
The Daily Management Course is making great progress in solving "problems they care about."

20) WHAT METHOD DO YOU USE TO MEASURE TQM SUCCESS?
The Baldridge Award criteria are used to evaluate the whole organization. PATs have performance criteria that assist in evaluating their success.

21) WHAT METHOD DO YOU USE TO MEASURE TQM TRAINING SUCCESS?

We have training objectives for each course and we also assess the courses with a beginning and ending evaluation. We also get some informal post-course feedback.

WHO MEASURES IT & HOW IS IT QUANTIFIED?

We use standard surveys and self-assessments.

22) HOW MANY FACILITATORS DO YOU HAVE TRAINED?

About 30 or 40.

IS THIS ADEQUATE & HOW DID YOU ARRIVE AT THAT NUMBER?

It's not really adequate because you can't facilitate and do your job at the same time.

23) WHAT HAVE YOU LEARNED FROM THE TQM IMPLEMENTATION PROCESS? (LESSONS LEARNED?)

1) "Continue top-down training."
2) The TQM mission and vision give focus for the organization.
3) Focus more on the values of the organization and integrate them into the incentive programs.
4) "Don't start with cross functional teams."
5) Use the Daily Management approach in fewer areas to provide better support.
6) Resource PATs so they can initially meet two hours a week.
7) Initially make physicians consultants on PATs, rather than having them as team members. It takes too much time away from their clinical duties.
8) "Provide an artificial environment to ensure the success of early teams. The result is infectious excitement."

24) WHAT WOULD YOU DESCRIBE AS THE 3 BEST THINGS YOU'VE DONE?

(1) "The CEOs exemplify the partnership spirit and provide visible leadership."

(2) "Using the eclectic approach in designing the program and ensuring that we didn't use a 'one best way' technique."

(3) Having an internal department who provides support for the teams.

25) WHAT 3 THINGS WOULD YOU CHANGE ABOUT THE PROCESS (MISTAKES)?

(1) "Work on values sooner."

(2) "Use an artificial environment to ensure success of early teams."

(3) Use less elapsed time for the PATs to complete their assignments. They should complete their study in six to nine months.